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CATALOGUE

OF THE

LEPIDOPTERA PHALÆNÆ

IN THE

BRITISH MUSEUM.

(Nat. Hist.)
Dept. of Zoology

SUPPLEMENT. VOLUME I.

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CATALOGUE

OF THE

AMATIDÆ

AND

ARCTIADÆ

(NOLINÆ AND LITHOSIANÆ)

IN THE

COLLECTION

OF THE

BRITISH MUSEUM.

BY

SIR GEORGE F. HAMPSON, BART.

LONDON:

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1914.

PREFACE.

Since the publication of the first two Volumes of the 'Catalogue of Moths,' Vol. I. in 1898 and Vol. II. in 1900, a very large number of species in the families of which they treat have been described, and it became necessary to prepare a Supplement in order to bring the subject matter of those volumes up to date. That Supplement is to be found in the present Volume.

The name *Amatidæ* is substituted for *Syntomidæ*, as the generic name *Amata*, Fabr., has been proved to have priority over *Syntomis*, Ochs.

The *Amatidæ* in Vol. I. contained 169 genera and 1184 species, to which are now added 16 genera and 945 species.

The *Nolinæ* in Vol. II. had 13 genera and 162 species, to which are added 1 genus and 116 species.

The *Lithosianæ*, also in Vol. II., had 244 genera and 1055 species, to which are added 73 genera and 880 species.

It is proposed to publish next a Supplementary Volume to Vol. III., containing the additions to the *Arctianæ* and *Agaristidæ*; then to continue the *Noctuidæ*, in which the preparation of the classification of the very large subfamily *Noctuinæ* is making steady progress.

Sir George Hampson has to acknowledge the assistance which he has received, mostly from those whose help has been referred to in earlier volumes of the Catalogue, by the loan of types and specimens, and in other ways.

The coloured drawings which have been made for him from types of species which are not in the Collection of the British Museum, and of which he has been unable to examine specimens, have been reproduced, and are severally acknowledged in the text.

The Plates in connection with this volume, which will be ready for publication about March 1915, are numbers I.–XLI. of the Supplement; No. XLII. will appear in Vol. II. of the Supplement.

CHARLES J. GAHAN,
Keeper of Entomology.

British Museum (Natural History),
November 10th, 1914.

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CATALOGUE

OF

LEPIDOPTERA PHALÆNÆ.

Family AMATIDÆ.

The name *Amata*, Fabr. having been proved to have priority over *Syntomis*, Ochs., the name of the family will have to be altered.

*4 *a*. Callitomis gigas.

Callitomis gigas, Roths. Nov. Zool. xvii. p. 429 (1910), & xix. p. 375, pl. iii. f. 22.

♀. Head and thorax ochreous grey mixed with blackish; antennæ black; palpi blackish; legs black-brown; abdomen pale yellowish with black-brown segmental bands, the anal tuft blackish at tip. Fore wing pale yellowish tinged with brown, the veins and costa brown; a pale wedge-shaped patch in terminal half of cell, an elongate mark above vein 6 and rounded spots above veins 4, 3; the termen with yellowish marks in the interspaces; cilia dark brown. Hind wing semihyaline yellowish tinged with brown; paler spots above bases of veins 2, 3; cilia dark brown.

Hab. PHILIPPINES, N. Luzon (*Whitehead*), type † ♀ in Coll. Rothschild. *Exp.* 48 millim.

4 *b*. Callitomis multicincta, n. sp. (Plate I. fig. 1.)

♂. Head, thorax, and abdomen dull brown, the last with yellow bands on each segment. Fore wing dull brown, rather thinly scaled; a rounded hyaline antemedial spot below the cell, a wedge-shaped spot in end of cell, a small oblique spot below base of vein 2, and elongate postmedial spots above veins 6, 4, 3. Hind wing

dull brown, thinly scaled; a rounded hyaline postmedial spot below vein 3 and traces of a small spot above it.

Hab. Java, Kawah-Manock, 6,000 ft. (*Cockayne*), 1 ♂ type. *Exp.* 26 millim.

7 *a*. **Callitomis phæosoma**, n. sp. (Plate I. fig. 2.)

♂. Head, thorax, and abdomen dark brown; wings uniform dull brown, thinly scaled.

Hab. Java, Tosavi, 6,000 ft. (*Cockayne*), 1 ♂ type. *Exp.* 20 millim.

*9 *a*. **Ceryx vespina**.

Eressa vespina, Roths. Nov. Zool. xix. p. 124 (1912).

♂. Head and thorax black-brown; frons yellow; shoulders and metathorax with yellow patches; abdomen black-brown with yellow bands on each segment, and the extremity yellow, the ventral surface yellow except the three terminal segments. Fore

Fig. 1.—*Ceryx vespina*, ♂. $\frac{1}{1}$.

wing hyaline, the veins and margins black-brown; a black-brown fascia between veins 6 and 5; the terminal band expanding towards apex and below vein 3. Hind wing hyaline, the base, cell, margins and vein 2 black-brown.

Hab. Borneo, Sarawak, Matang, type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

11 *a*. **Ceryx albipuncta**. (Plate I. fig. 3.)

Ceryx albipuncta, Hmpsn. A. M. N. H. (7) xix. p. 221 (1907).

♂. Head, thorax, and abdomen black-brown; frons white; tegulæ with lateral white patches; patagia with white streaks on outer edges; dorsum of thorax with white streak, metathorax with whitish patch; sides of pectus and coxæ with white patches; hind femora streaked with white; abdomen with dorsal series of small whitish spots except at extremity and complete ventral series of whitish bands. Fore wing black-brown; a wedge-shaped hyaline patch in cell; a patch in submedian interspace from base to near termen, its lower edge indented by a small dark tooth at middle; a spot above base of vein 2; a postmedial streak above vein 6 and slight streak above 7; elongate spots above veins 4, 3. Hind wing black-brown with small hyaline spot in lower extremity of cell and

large patches in submedian interspace and above vein 2 extending nearly to termen.

Hab. PHILIPPINES, Luzon, Benguet, Prov. Irisan (*McGregor*), 1 ♂ type. *Exp.* 30 millim.

13 *a*. Ceryx bifasciata.

Pseudonaclia bifasciata, Auriv. Sjöstedt's Kilima'njaro-Meru Exp. 9, p. 24, pl. 1. f. 10 (1910).

Antennæ of male with short branches, of female ciliated.

♂. Head orange with dark brown bars on frons and between antennæ which are dark brown, orange towards base and white at tips; thorax dark brown, the tegulæ orange at tips, the patagia with short orange streaks, the metathorax with lateral orange streaks; tibiæ and tarsi orange, brown at extremities; abdomen brown with orange bands on each segment, the anal tuft orange and brown. Fore wing dark brown; an oblique orange antemedial

Fig. 2.—*Ceryx bifasciata*, ♂. ½.

band from below costa to inner margin towards which it narrows; a quadrate orange spot in the cell connected with an oblique triangular orange patch from below middle of cell to tornus; an oblique orange band from just below costa beyond middle to near termen at vein 3, its inner edge slightly incurved at veins 5 and 3. Hind wing dark brown with orange basal patch and discoidal striga connected with a spot from lower angle of cell to tornus.

♀. Fore wing with the triangular patch below the cell connected with the antemedial band by a streak in submedian fold, the postmedial band broader and bent outwards to termen above vein 3.

Hab. BR. E. AFRICA, Mt. Kenia, 5,000 ft. (*Neave*), 1 ♂, 4 ♀; GERM. E. AFRICA, Kilima'njaro. *Exp.* 22 millim.

13 *b*. Ceryx nacliodes, n. sp. (Plate I. fig. 4.)

♂. Head and thorax orange mixed with some dark brown; antennæ dark brown beyond middle and white at tips; tibiæ and tarsi brown at extremities; abdomen orange with narrow brown segmental bands. Fore wing dark-brown; a broad oblique orange antemedial band from just below costa to inner margin, connected by a broad fascia in submedian interspace with a broad orange band from just below costa to just above inner margin near tornus, its outer edge slightly indented at median nervure, these bands

leaving a rounded patch of the ground-colour between them on costal area and in the cell; a broad orange band from costa beyond middle to vein 3 where its outer edge touches the termen. Hind wing aborted (? abnormal).

Hab. Mashonaland (*Dobbie*), 1 ♂ type. *Exp.* 16 millim.

16 *a*. Ceryx affinis.

Ceryx affinis, Roths. Nov. Zool. xvii. p. 429 (1910), & xix. p. 375, pl. iii. f. 15.

♂. Head and thorax black-brown, the frons, tegulæ, base of patagia, and metathorax orange-yellow; abdomen black-brown with orange-yellow bands not quite meeting dorsally except on penultimate segment. Fore wing black-brown; a slight yellow streak above base of vein 1; a wedge-shaped hyaline patch in cell, elongate patch below the cell, and elongate spots above veins 7, 6, 4, 3. Hind wing black-brown with some yellow below the cell towards base and hyaline spots above and below vein 2.

Hab. Br. N. Guinea, Kumusi R. (*Meek*), type † ♂ in Coll. Rothschild; Queensland, Kuranda (*Dodd*), 1 ♂. *Exp.* 32 millim.

*17 *a*. Ceryx aroa. (Plate I. fig. 5.)

Ceryx aroa, Beth.-Baker, Nov. Zool. xi. p. 382 (1904).

♀. Head, thorax, and abdomen black-brown; frons with ochreous white patch; shoulders with yellow patches; metathorax with paired yellowish spots; abdomen with subdorsal yellowish bars on extremities of 3rd, 4th, 5th, and 6th segments and lateral series of small spots. Fore wing black-brown; a wedge-shaped hyaline patch in cell; a hyaline patch in submedian interspace from near base to near termen, extending slightly below vein 1 beyond middle; elongate spots above veins 7, 6, 4, 3, and a small spot above base of vein 2. Hind wing black-brown with hyaline patches in submedian interspaces and between veins 2 and 5.

Hab. Br. N. Guinea, Up. Aroa R. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 36 millim.

*17 *b*. Ceryx ceiensis.

Ceryx keiensis, Roths. Nov. Zool. xvii. p. 430 (1910), & xix. p. 375, pl. 3. f. 38.

♀. Head, thorax, and abdomen black-brown tinged with blue; frons, patagia, and metathorax with yellow patches; abdomen with subdorsal and lateral series of yellow spots. Fore wing black-brown; a wedge-shaped hyaline patch in cell, elongate patch below the cell, and elongate spots above veins 7, 6, 4, 3. Hind wing black-brown with hyaline spots above and below vein 2.

Hab. Kĕ Is. (*Kühn*), type † ♀ in Coll. Rothschild. *Exp.* 32 millim.

*17 *c*. Ceryx minor.

Ceryx swinhœi, minor, Roths. Nov. Zool. xvii. p. 431 (1910), & xix. p. 376, pl. iii. f. 42.

♂. Head, thorax, and abdomen black-brown slightly tinged with blue; base of patagia and metathorax with yellow patches; fore legs with tufts of white scales below; abdomen with lateral yellow spot at base followed by slight streaks on three following segments. Fore wing black-brown; a wedge-shaped hyaline patch in cell, elongate triangular patch below the cell, elongate spots above veins 6, 4, 3 and slight streak above vein 7. Hind wing black-brown with hyaline spots above and below vein 2.

Hab. Moluccas, Manavolka I. (*Kühn*), type † ♂ in Coll. Rothschild. *Exp.* 28 millim.

*20 *a*. Ceryx dohertyi.

Hyalæthea dohertyi, Roths. Nov. Zool. xvii. p. 440 (1910), & xix. p. 376, pl. iv. f. 25.

♂. Head, thorax, and abdomen black-brown; frons whitish; patagia at base and metathorax with whitish patches; abdomen with subdorsal and lateral series of small whitish spots except on basal and terminal segments and ventral series of whitish bands. Fore wing black-brown with a cupreous tinge; a wedge-shaped hyaline patch in end of cell, elongate patch below the cell, triangular spot above base of vein 6, and small spot below vein 4 towards termen. Hind wing black-brown with a cupreous tinge; a small hyaline spot below origin of vein 2.

Hab. Br. N. Guinea, Humbolt Bay (*Doherty*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

*20 *b*. Ceryx swinhœi. (Plate I. fig. 6.)

Ceryx swinhœi, Beth.-Baker, Nov. Zool. xi. p. 383 (1904).

♂. Head and thorax black-brown; shoulders with pale yellow patches; the dilated fore legs yellowish white on inner side; coxæ yellowish white; abdomen blue-black. Fore wing black-brown; a wedge-shaped hyaline patch in cell; the submedian interspace with hyaline patch from before middle to near termen; elongate hyaline spots above veins 6, 4, 3 and a small spot above vein 7. Hind wing black-brown with hyaline patch in submedian interspace and above vein 2.

Hab. Br. N. Guinea, Up. Aroa R. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 28 millim.

*20 *c*. Ceryx cuehni.

Ceryx kuehni, Roths. Nov. Zool. xvii. p. 430 (1910), & xix. p. 376, pl. iii. f. 41.

♂. Head, thorax, and abdomen black-brown slightly tinged with blue; fore legs with tufts of yellowish hair below. Fore

wing black-brown; a wedge-shaped hyaline patch in cell, elongate patch below the cell, and elongate spots above veins 7, 6, 4, 3. Hind wing black-brown with large hyaline spots above and below vein 2.

Hab. Ké Is., Taam I. (*Kühn*), type † ♂ in Coll. Rothschild. *Exp.* 28 millim.

25. **Ceryx exapta,** insert (syn.):—

Amata everetti, Roths. Nov. Zool. xvii. p. 436 (1910), & xix. p. 376, pl. iv. f. 3.

Flores (*Everett*), type † ♀ in Coll. Rothschild.

28 *a*. **Ceryx pleurasticta.** (Plate I. fig. 7.)

Ceryx pleurasticta, Hmpsn. A. M. N. H. (7) viii. p. 165 (1901).

♂. Purple-black; back of head orange; pectus with lateral orange spots; tarsi with the 1st joint white; abdomen with dorsal orange patch on 1st segment and band on 5th, the intermediate segments with lateral spots. Fore wing with hyaline spot below the cell near base; a wedge-shaped patch in end of cell and another below base of vein 2; a round spot above base of vein 2 and more elongate spots above veins 3, 4, and 6. Hind wing with hyaline patch below middle of cell and round spot above vein 2.

Hab. Bombay, Kanara, Siddapah (*Davidson*), 1 ♂ type. *Exp.* 24 millim.

30. **Ceryx imaon.**

Larva. Piepers, Tijd. v. Ent. xlvii. p. 49.

Black clothed with long hair; head orange.
Pupa in a cocoon of filaments.

30 *a*. **Ceryx craushayi.** (Plate I. fig. 8.)

Ceryx crawshayi, Hmpsn. A. M. N. H. (7) viii. p. 166 (1901).

Black; patagia with orange patches; abdomen with dorsal orange patch on 1st segment and subdorsal and lateral band on 4th segment. Fore wing with hyaline wedge-shaped patch nearly filling the cell; an elongate patch below the cell from near base to near termen and elongate spots above veins 6, 4, and 3. Hind wing hyaline, the veins and margins black; the terminal band expanding at apex and dentate inwards at vein 2.

Hab. Br. E. Africa, Kikuya, Roroma (*Crawshay*), 1 ♂, 2 ♀ type. *Exp.* 26 millim.

31. **Ceryx chea,** insert (syn.):—

Syntomis sibulana, Semp. Reis. Phil., Schmett. ii. p. 419 (1893).

33. **Ceryx transitiva**, insert (syn.):—

Amata vanderpolli, Roths. Nov. Zool. xvii. p. 436 (1910), & xix. p. 376, pl. iv. f. 2.

Sumatra, Padang, type † ♂ in Coll. Rothschild.

34. **Ceryx albimacula** del. *Syntomis hilda* and *S. cybelistes*.

34 *a*. **Ceryx cybelistes.** (Plate I. fig. 9.)

Syntomis cybelistes, Holl. Psyche, vi. p. 393 (1893).
Ceryx albimacula, Hmpsn. Cat. Lep. Phal. B.M. i. p. 45 (part.).

Head, thorax, and abdomen black suffused with metallic green; frons with white spot; abdomen with narrow white dorsal band at base. Fore wing black suffused with metallic green; a wedge-shaped hyaline patch in the cell, an elongate patch below the cell and vein 2, and elongate spots above veins 6, 4, 3; a wedge-shaped white spot on termen and cilia below apex. Hind wing hyaline, the costa and termen black suffused with metallic green, the terminal band broad at costa and narrowing to tornus.

Hab. Gaboon, Ogové R., type † ♀ in Coll. Holland; Uganda, S.E. Buddu, Toro Forest (*Neave*), 1 ♂. *Exp.* 36 millim.

36. **Ceryx seminigra**, insert:—

Syntomis hilda, Erhmann, Can. Ent. xxvi. p. 69 (1894),

which has precedence.

*37 *a*. **Ceryx flava.** (Plate I. fig. 10.)

Ceryx flava, Beth.-Baker, A. M. N. H. (8) vii. p. 530 (1911).

♂. Head, thorax, and abdomen fulvous yellow; palpi, antennæ, and legs black-brown. Fore wing hyaline, the veins and margins black-brown; some yellow above base of vein 1 and a yellow streak on basal half of inner margin; a triangular black-brown patch beyond the discocellulars produced as a streak in discal fold to the terminal band which expands widely on apical area and below vein 3. Hind wing yellow, the terminal half black-brown with irregular inner edge.

Hab. N. Angola, N'Dalla Tando (*Ansorge*), type † ♂ in Coll. Bethune-Baker. *Exp.* 28 millim.

*37 *b*. **Ceryx cannegieteri.**

Trichæta kannegieteri, Roths. Nov. Zool. xvii. p. 431 (1910), & xix. p. 376, pl. iii. f. 43.

♂. Head, thorax, and abdomen black-brown; antennæ white at tips; pectus with small white spots; mid and hind tarsi with the 1st joint white above; abdomen slightly glossed with blue, a

lateral white spot at base and ventral white band on 6th segment. Fore wing black-brown; a small round medial hyaline spot in submedian interspace, spots in end of cell and above vein 6, and more elongate spots above veins 4 and 3. Hind wing black-brown with small white spot below base of cell and larger hyaline spot above vein 2.

Hab. Nias I., Hili Madjedja (*Kannegieter*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

38. **Ceryx expandens**, insert (syn.):—

Ceryx ericssoni, Roths. Nov. Zool. xvii. p. 430 (1910), & xix. p. 375, pl. iii. f. 39.

Sumatra, Padang, Sidempæan, type † ♀ in Coll. Rothschild.

45 *a*. **Myopsyche xanthosoma.** (Plate I. fig. 11.)

Myopsyche xanthosoma, Hmpsn. A. M. N. H. (7) xix. p. 222 (1907).

♀. Head black; palpi and proboscis orange; antennæ white at tips; thorax black with some orange scales, the tegulæ and patagia orange; legs mostly orange; abdomen orange, the last three segments black at sides and below. Fore wing hyaline, the veins and margins black; the base with orange patch; a black discoidal patch emitting a fascia between veins 5, 6 to the terminal band which expands widely on apical area and into a bidentate patch below vein 2. Hind wing hyaline, the veins and margins black, the base, cell, and costal area to beyond middle orange; the terminal band expanding widely on apical area and below vein 2.

Hab. Uganda, Entebbe (*E. A. Minchin*), 1 ♀ type. *Exp.* 30 millim.

*46 *a*. **Myopsyche alluaudi.**

Naclia alluaudi, Oberth. Ann. Soc. Ent. Fr. lxxix. p. 467, pl. 16. f. 6 (1911).

♂. Head and thorax dark-brown; tegulæ orange at sides; legs brown; abdomen black with the two basal and two penultimate segments orange. Fore wing black-brown with wedge-shaped hyaline patch in end of cell, a triangular patch below the cell and vein 2 and elongate spots above veins 6, 4, 3. Hind wing with the basal half orange, the terminal half black-brown; the underside with the costal edge black-brown to near base.

Hab. Madagascar, Diego-Suarez (*Alluaud*). *Exp.* 26 millim. This species is unknown to me.

Genus **SYMPHLEBOMIS.**

Type.

Symphlebomis, Hmpsn. A. M. N. H. (7) xv. p. 425 (1905) ..... *antipolo.*

Proboscis fully developed; palpi porrect, not reaching beyond the frons; antennæ of male ciliated. Fore wing of female with vein 3 from angle of cell; 4, 5 strongly stalked; 6 from well below upper angle; 7, 8, and 11

stalked, 9, 10 absent; male with a fold below base of cell; vein 1 sinuous, 2 bent upwards near its base, the lower angle of cell bent up to upper angle with the opening of a very large pouch above it. Hind wing with veins 3 and 5 from angle of cell, 4 absent; 6, 7 coincident.

In key differs from *Thylacoptera* in the fore wing having vein 8 present.

*51 *a*. Symphlebomis antipolo.

Syntomoides antipolo, Semp. Reis. Phil., Schmett. ii. p. 418, pl. 53. f. 2 (1893).

♂. Black; frons and streaks on fore coxæ white; tegulæ, patagia, and pectus with pale yellow spots; abdomen with lateral and ventral series of pale yellow spots. Fore wing with elongate hyaline spot in end of cell and triangular spot below base of vein 2; rather small spots above bases of veins 2 and 3. Hind wing with trilobate hyaline patch below the cell and between veins 2 and 5.

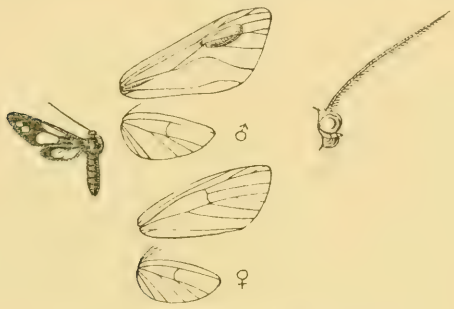

Fig. 3.—*Symphlebomis antipolo*, ♂. ½.

♀. Abdomen with yellowish dorsal spot on 1st segment, the terminal segment brown; fore wing with the spot in cell wedge-shaped, an elongate spot below base of cell and quadrate spot below vein 2; spots above veins 3 and 4 and a streak above 6.

Hab. Philippines, Luzon, type † ♂ ♀ in Coll. Semper. *Exp.* 24 millim.

*54 *a*. Trichæta aurantiobasis.

Ceryx aurantiobasis, Roths. Nov. Zool. xvii. p. 430 (1910), & xix. p. 375, pl. iii. f. 40.

♂. Head, thorax, and abdomen black-brown, the frons, tegulæ, patagia, and metathorax with yellow patches; fore coxæ and pectus in front yellow, the fore legs with tufts of white hair below; abdomen with subdorsal series of yellow spots. Fore wing black-brown; a wedge-shaped hyaline patch in cell, elongate patch below the cell, elongate spot above vein 6, small spot above vein 4, and elongate spot above vein 3. Hind wing black-brown; the base of

inner area yellow extending just into the cell; a rather pear-shaped hyaline spot above vein 2; the underside with the cell yellow.

Hab. Dutch N. Guinea, Kapaur (*Doherty*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

56 *a*. **Trichæta burtti.** (Plate I. fig. 22.)

Syntomis burtti, Dist. Entom. xxxiii. p. 261 (1900).

♂. Black; frons, vertex of head, tegulæ, patagia, and some scales on thorax orange; hind tibiæ with the medial part dirty white; abdomen orange with subventral stripes and the sides and ventral surface of anal tuft black. Fore wing with wedge-shaped orange patch in middle of cell and square spot below it; large hyaline spots above veins 2 and 3, an elongate spot above 6 and wedge-shaped spot above 7. Hind wing with somewhat triangular orange spot on basal half of inner margin.

Hab. Br. E. Africa, Pemba I., 2 ♂ type. *Exp.* 28 millim.

*56 *b*. **Trichæta schultzei.** (Plate I. fig. 12.)

Trichæta schultzei, Auriv. Ark. f. Zool. ii. 12. p. 24 (1905).

♂. Head, tegulæ, and patagia orange; antennæ and thorax dark brown; metathorax with orange patch; pectus orange; legs brown, the femora and tibiæ with some yellowish; abdomen orange, the 1st three segments with dorsal brown bands, the next two with slight subdorsal spots; anal tuft black-brown. Fore wing brown with a cupreous gloss; a wedge-shaped hyaline patch in cell, its extremity edged with yellow scales; an irregular oblong hyaline patch below middle of cell edged by yellow below; a postmedial round hyaline spot above vein 6 edged by yellow on outer side and conjoined spots above veins 4, 3. Hind wing brown with a cupreous gloss, the area below the cell and beyond it up to vein 5 hyaline leaving a terminal brown band, wide at costa, narrowing to a point at tornus.

Hab. Nigeria, Benue R., Kinada type † ♂ in Mus. Stockholm. *Exp.* 18 millim.

*57 *a*. **Trichæta dohertyi.** (Plate I. fig. 13.)

Ceryx dohertyi, Roths. Nov. Zool. xvii. p. 430 (1910).

♂. Head and thorax black-brown; frons white; shoulders with white spots; antennæ white at tips; coxæ white; abdomen black glossed with blue, the ventral surface with four white bands. Fore wing black-brown; an elongate hyaline patch below middle of cell and quadrate patch in middle of cell; a hyaline patch beyond the cell between veins 7 and 3, its edges waved. Hind wing black-brown; a hyaline patch below the cell extending to near termen, its outer edge slightly sinuous.

♀. Frons, shoulders, and coxæ without white patches, abdomen without white bands on ventral surface; fore wing with the white patch beyond the cell interrupted between veins 6 and 5 where there are two slight streaks just beyond the cell.

Hab. Perak (*Doherty*), type † ♂ in Coll. Rothschild, Padang-Rengas. *Exp.* 28–30 millim.

58 *a*. **Trichæta proleuca.** (Plate I. fig. 14.)

Trichæta proleuca, Hmpsn. A. M. N. H. (7) xi. p. 337 (1903).

Black shot with purple; frons and fore coxæ in front white; antennæ white at tips. Fore wing with quadrate hyaline antemedial patch below the cell and small postmedial spot above vein 1 sometimes connected with the antemedial patch; a postmedial band between veins 7 and 3 expanding outwards below vein 5.

Hab. Sumatra, 2 ♂, 2 ♀ type. *Exp.* 30 millim.

*58 *b*. **Trichæta borealis.** (Plate I. fig. 15.)

Trichæta albifrontia, borealis, Roths. Nov. Zool. xix. p. 123 (1912).

♂. Head and thorax black-brown; frons white; shoulders with white spots; antennæ white at tips; coxæ white; abdomen black-brown dorsally glossed with blue. Fore wing black-brown; a quadrate hyaline spot below middle of cell; an elliptical hyaline spot above base of vein 6 and another above vein 3 with a small spot above vein 4. Hind wing black-brown, a hyaline spot below end of cell above and below vein 2.

♀. Coxæ not white.

Hab. Borneo, Sarawak, Limbang, type † ♂ in Coll. Rothschild, N. Borneo, Tutong (*Everett*). *Exp.* 24 millim.

*61 *a*. **Trichæta hosei.**

Trichæta hosei, Roths. Nov. Zool. xvii. p. 431 (1910), & xix. p. 375, pl. iii. f. 30.

♂. Head, thorax, and abdomen black-brown, the last dorsally glossed with blue; antennæ white at tips. Fore wing very dark reddish brown, the veins faintly glossed with blue; a small quadrate hyaline antemedial spot below the cell, and oblique postmedial patch from vein 7 to vein 3 near termen. Hind wing very dark red-brown, the inner margin and termen towards tornus slightly glossed with blue; a small hyaline spot above base of vein 2.

Hab. N. Borneo, Mt. Mulu (*Hose*), type † ♂ in Coll. Rothschild. *Exp.* 38 millim.

*61 *b*. **Trichæta biplagiata.** (Plate I. fig. 16.)

Trichæta biplagiata, Roths. Nov. Zool. xix. p. 123 (1912).

♀. Head and thorax black-brown; abdomen black glossed with blue. Fore wing black-brown; a quadrate hyaline antemedial spot

below the cell; a hyaline patch beyond the cell between veins 7 and 3, its outer edge waved and produced between veins 5 and 3. Hind wing black-brown.

Hab. Borneo, Sarawak, Kiesin Hills, type † ♀ in Coll. Rothschild. *Exp.* 26 millim.

66. **Trichæta teneiformis**, insert (syn.):—

Eressa simplex, Roths. Nov. Zool. xvii. p. 439 (1910), & xix. p. 376, pl. v. f. 20.

Simla, type † ♂ in Coll. Rothschild.

67 *a*. **Trichæta monoleuca**. (Plate I. fig. 17.)

Trichæta monoleuca, Hmpsn. A. M. N. H. (7) xi. p. 337 (1903).

♀. Black; frons and patches on patagia and pectus white; abdomen dorsally tinged with green and with white basal patch, the ventral surface with white segmental lines. Fore wing with elongate hyaline patch below the cell and base of vein 2, a small wedge-shaped spot in cell and larger spot above vein 6 and a rounded spot above and below vein 4. Hind wing with hyaline patch below the cell and between veins 2 and 5.

Hab. Singapore (*Ridley*), 1 ♀ type. *Exp.* 30 millim.

Genus **PSEUDOCERYX**.

Type.

Pseudoceryx, Roths. Nov. Zool. xvii. p. 440 (1910) ..... *dohertyi*.

Proboscis fully developed; palpi porrect, short; antennæ of male somewhat laminate and almost simple; tibiæ with the spurs minute; abdomen smoothly scaled. Fore wing with the termen excised from vein 5 to tornus, the inner margin fringed with hair and lobed at middle; vein 3 from close to angle of cell; 4, 5 stalked; 6 from well below upper angle; 7, 8, 9, 10, 11 stalked. Hind wing small; veins 3 and 5 from angle of cell; 4 and 6 absent; 7 strongly downcurved towards apex; the inner margin with a fold containing a fringe of scales below.

In key differs from *Trichæta* in the fore wing having vein 6 from well below angle of cell and the termen excised from vein 5 to tornus.

*68 *a*. **Pseudoceryx dohertyi**.

Pseudoceryx dohertyi, Roths. Nov. Zool. xvii. p. 440 (1910), & xix. p. 376, pl. iv. f. 29.

♂. Head and thorax black-brown, the frons, patagia at base, and

Fig. 4.—*Pseudoceryx dohertyi*, ♂. ½.

metathorax with whitish patches; abdomen black-brown suffused

with metallic blue; subdorsal and lateral series of minute whitish spots except on basal and terminal segments. Fore wing black-brown; a wedge-shaped hyaline patch in cell, elongate curved patch below the cell from near base to near termen, and elongate spots above veins 6, 4, 3. Hind wing black-brown with a bluish gloss; a hyaline spot below the cell.

Hab. Dutch N. Guinea, Geelvink Bay, Biak I. (*Doherty*), type † ♂ in Coll. Rothschild. *Exp.* 32 millim.

Genus **SYNTOMIS.**

Amata, Fabr. Illiger's Mag. vi. p. 289 (1808), type *passalis*, has priority.

*72 *a*. **Amata sexpuncta.** (Plate I. fig. 18.)

Eressa sexpuncta, Roths. Nov. Zool. xix. p. 124 (1912).

♀. Head and thorax black-brown; antennæ white at tips; abdomen black-brown, a yellow dorsal patch on basal segment and band on 5th segment except on ventral surface. Fore wing black-brown; small round hyaline spots below middle of cell, in the cell towards extremity and beyond the cell above veins 6 and 3. Hind wing black-brown with round hyaline spot below middle of cell, and elliptical spot above vein 2.

Hab. Borneo, Sarawak, Limbang, type † ♀ in Coll. Rothschild. *Exp.* 28 millim.

*74 *a*. **Amata calidupensis.**

Amata kalidupensis, Roths. Nov. Zool. xvii. p. 432 (1910), & xix. p. 376, pl. iii. f. 46.

♂. Head scarlet, the palpi and antennæ brown, the latter white at tips; tegulæ scarlet at base, the shoulders with scarlet spots, the rest of thorax brown; pectus scarlet; legs brown; abdomen brown with scarlet bands on each segment. Fore wing black-brown; a wedge-shaped hyaline patch in cell, elongate patch below the cell, and elongate spots above veins 6, 4, 3. Hind wing black-brown with hyaline spots below the cell and above veins 2 and 3.

Hab. Moluccas, Toekan Bessi Is., Kalidupa (*Kühn*), type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

74 *b*. **Amata hemiphœnica.**

Syntomis hemiphœnica, Hmpsn. P. Z. S. 1910, p. 389, pl. xxxvi. f. 1.

♂. Head and thorax black with a faint metallic gloss; antennæ white at tips; frons white; tarsi whitish at base; abdomen crimson, the last three segments and the ventral surface black with a faint metallic gloss. Fore wing black with a faint metallic gloss; a wedge-shaped hyaline patch in cell, an oblique patch below vein 2

and elongate patches above veins 7, 6, 4, 3. Hind wing black with a faint metallic gloss; a large hyaline patch below the cell from before middle to near tornus and a round patch beyond the cell above vein 2.

♀. Abdomen with dorsal maculate black fascia on segments 3 to 5.

Hab. Congo, Kambove Distr. (*Neave*), 1 ♂, 2 ♀ type. *Exp.* 24 millim.

*76 *a*. **Amata xanthosoma.** (Plate I. fig. 19.)

Hydrusa xanthosoma, Turner, T. R. Soc. S. Austr. xxii. p. 93 (1898).
Hydrusa cremnotherma, Lower, P. Linn. Soc. N. S. W. xxv. p. 29 (1900).

♂. Head, thorax, and abdomen orange fulvous; antennæ and part of tibiæ and tarsi black; abdomen with traces of segmental black rings, the anal tuft tipped with black. Fore wing orange, the veins black; the costa narrowly black on basal half, the costal area black from end of cell to apex; a black fascia on inner margin; an irregular black antemedial bar across submedian interspace; a discoidal bar; a terminal black band expanding into a patch above vein 2. Hind wing orange; the veins black; a black mark on discocellulars; a terminal black band expanding widely towards apex and below vein 2.

Hab. Queensland, type † ♂ in Coll. Turner, Irrapatara, type † ♂ *cremnotherma* in Coll. Lower. *Exp.* 32 millim.

*76 *b*. **Amata tunneyi.**

Amata tunneyi, Roths. Nov. Zool. xvii. p. 431 (1910), & xix. p. 376, pl. iii. f. 44.

♂. Head, thorax, and abdomen orange-yellow; antennæ fuscous; tibiæ and tarsi tinged with brown. Fore wing semihyaline orange-yellow, the veins and costa dark brown; an antemedial dark brown bar constricted at middle in submedian fold with a dark fascia beyond it on inner margin; a blackish discoidal spot conjoined to the dark costal area; a narrow dark brown terminal band expanding into a spot between veins 3 and 2. Hind wing orange-yellow; a black discoidal spot conjoined to a fascia on terminal half of costa; a narrow blackish terminal band expanding into a wedge-shaped mark below vein 2.

Hab. W. Australia, Derby (*Tunney*), type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

77. **Amata humeralis**, insert (syn.):—

Eressa olinda, Swinh. Cat. Het. Mus. Oxon. i. p. 53 (1892).

♂. Abdomen with the anal tuft black with orange dorsal spot; fore wing with slight orange streak above base of vein 2.

Queensland, Pt. Darwin.

77 *a*. Amata prosomœa. (Plate I. fig. 20.)

Syntomis prosomœa, Turner, P. Linn. Soc. N. S. W. xxix. p. 850 (1905).

♂. Black-brown; head except palpi, tegulæ, and patagia except at base orange; metathorax with orange spot; pectus with lateral spots, femora orange above; abdomen with dorsal spot at base followed by six orange bands, the anal tuft black, orange at extremity. Fore wing with semihyaline orange-tinged streak below base of costa; quadrate spots below base and in end of cell; an oblique wedge-shaped spot below vein 2; streaks above veins 6, 7, and spots above veins 3, 4. Hind wing with almost basal orange band with irregular outer edge emitting a streak in cell to the elongate spot above vein 2; a spot above vein 3 and slight spot above vein 6.

Hab. Queensland, Brisbane (*Turner*), 2 ♂. *Exp.* 34 millim.

*77 *b*. Amata dyschlæna. (Plate I. fig. 21.)

Syntomis dyschlæna, Turner, P. Linn. Soc. N. S. W. xxix. p. 855 (1905).

♂. Black-brown, the markings dull reddish orange; head reddish orange, the palpi, antennæ, and a band between their bases black; tegulæ, patches on patagia, metathorax, and sides of pectus orange; abdomen with dorsal orange patch on 1st segment followed by six bands and a small spot on anal tuft; wings tinged with dull reddish. Fore wing with small quadrate reddish orange semihyaline spots below base and in end of cell; a wedge-shaped spot below base of vein 2, spots above veins 3, 4, an elongate spot above 6 and slight reddish orange marks above 5 and 7. Hind wing with dull reddish orange basal patch in and below cell not conjoined to the small spots above veins 2 and 3.

♀. Abdomen with five bands beyond the basal patch, the anal tuft brownish; fore wing with dull reddish orange streak below costa.

Hab. Queensland, Townsville, type † in Coll. Turner. *Exp.* 32 millim.

80 *b*. Amata madurensis. (Plate I. fig. 23.)

Syntomis madurensis, Hmpsn. A. M. N. H. (7) viii. p. 166 (1901).

♂. Antennæ with long branches; black-brown; frons and patagia with orange patches; hind tibiæ with orange streak; tarsi with the 1st joint orange; abdomen with orange bands on 1st and 5th segments and small spots on terminal segment. Fore wing with quadrate hyaline spots below base and in end of cell; an oblique spot below vein 2; spots above veins 3 and 4 and a smaller spot above 6. Hind wing with orange medial band from cell to inner margin.

Hab. Madras, Madura, Ammanayanahramir (*Campbell*), 4 ♂ type, Palnis, Kodaikanal (*Campbell*), 1 ♂. *Exp.* 22 millim.

81 *a*. **Amata leucozona.** (Plate I. fig. 24.)

Syntomis leucozona, Hmpsn. A. M. N. H. (8) viii. p. 393 (1911).

♀. Head, thorax, and abdomen black-brown with a slight bluish gloss; frons white; shoulders and pectus with white spots; abdomen with subdorsal white spots on 1st segment, lateral spots on 2nd segment and dorsal band on 4th segment. Fore wing black-brown with a faint bluish gloss; a triangular semihyaline white spot below middle of cell and postmedial spots below veins 7, 5, 4. Hind wing black-brown with a faint bluish gloss; a round semihyaline white spot below the cell and postmedial spots below veins 5 and 3, the latter small.

Hab. Borneo, Limbang (*Moulton*), 1 ♀ type. *Exp.* 46 millim.

*81 *b*. **Amata leucozonoides.** (Plate II. fig. 30.)

Amata leucozonoides, Roths. Nov. Zool. xix. p. 123 (1912).

♀. Head, thorax, and abdomen black-brown; frons white; tegulæ with white patches at base; pectus and coxæ with white patches; abdomen with dorsal white patch at base and band on 5th segment, sublateral white patches on two basal segments and bands on 3rd and 4th. Fore wing black-brown with semihyaline rather quadrate white patch below middle of cell, smaller patch in end of cell, patches above veins 6 and 3, and slight mark above 4. Hind wing black-brown with rounded semihyaline white patch below the cell and patch above vein 2.

Fore wing with veins 4, 5 shortly stalked.

Hab. Borneo, Kuching (*Shelford*), type † ♀ in Coll. Rothschild. *Exp.* 50 millim.

*82 *a*. **Amata pembertoni.**

Amata pembertoni, Roths. Nov. Zool. xvii. p. 431 (1910), & xix. p. 376, pl. iii. f. 45.

♀. Head, thorax, and abdomen black-brown slightly glossed with blue. Fore wing black-brown faintly glossed with blue; a triangular hyaline spot in end of cell with smaller spot below it. Hind wing black-brown faintly glossed with blue; a hyaline spot below middle of cell.

Hab. Angola, Callulu (*Pemberton*), type † ♀ in Coll. Rothschild. *Exp.* 28 millim.

85 *a*. **Amata subdiaphana**, n. sp. (Plate I. fig. 25.)

♀. Head, thorax, and abdomen black-brown, the frons, tegulæ, patagia except at edges, streaks on the mesothorax and patches on metathorax orange-yellow; pectus and coxæ with yellow patches, the mid tarsi with some yellow on basal joint; abdomen with

orange-yellow bands on each segment, the anal segment brown, the ventral surface with broad pale yellow bands. Fore wing hyaline, the veins and margins black-brown; a rather quadrate black-brown discoidal patch; the terminal band expanding widely at apex, into a wedge-shaped patch between veins 6 and 5 and slightly between veins 3 and 2. Hind wing hyaline, the veins and margins black-brown, the terminal band narrowing to a point at tornus; some yellow on inner margin.

Hab. Java, 1 ♀ type, Salak (*Kirkpatrick*), 1 ♀. *Exp.* 36–38 millim.

89 *a*. **Amata paradelpha.** (Plate I. fig. 26.)

Syntomis paradelpha, Turner, P. Linn. Soc. N. S. W. xxix. p. 846 (1905).

♂. Black with a slight greenish gloss; antennæ white at tips; frons, tegulæ, and lateral patches on pectus orange: abdomen with dorsal deep orange patch at base followed by six bands and a dorsal patch on terminal segment. Fore wing with small quadrate hyaline spots below base and in end of cell, the former slightly tinged with orange; an oblique bar-shaped spot below base of vein 2 and postmedial spots above veins 3, 4, and 6. Hind wing with small orange-tinged spot below base of cell and spot above base of vein 2.

♀. Abdomen with five bands beyond the basal patch, the anal tuft orange and ochreous; wings with the spots rather larger and more tinged with orange.

Hab. Queensland, Darling Downs, Mt. Sturt (*Turner*), 1 ♂, 1 ♀, Brisbane (*Turner*), 1 ♂. *Exp.* 32 millim.

*89 *b*. **Amata arfacensis.**

Amata arfakensis, Roths. Nov. Zool. xviii. p. 154 (1911), & xix. p. 377, pl. v. f. 24.

♂. Head and tegulæ orange; palpi black except at tips; antennæ and a bar between their bases black; thorax black with a greenish gloss; orange patches on metathorax and sides of pectus; abdomen greenish black with orange bands on each segment and the extremity orange, the ventral surface with three orange bands. Fore wing black glossed with green; a rounded hyaline antemedial spot below the cell; a conical spot in end of cell, oblique spot below base of vein 2, elongate spots above vein 6, and spots above and below vein 4. Hind wing black glossed with green; a hyaline spot below the cell, small spot in cell above origin of vein 2, oblique spot below vein 4, and minute spot above it.

Hab. Dutch N. Guinea, Arfak Mts., Ninay Valley, type † ♂ in Coll. Rothschild. *Exp.* 40 millim.

91 *a*. **Amata sala.** (Plate I. fig. 27.)

Syntomis sala, Swinh. A. M. N. H. (7) ix. p. 77 (1900).

♂. Black; frons yellow; antennæ yellowish white at tips; tegulæ with some yellow hair beneath; abdomen with seven narrow yellow

bands. Fore wing with quadrate hyaline patch below base of cell, a wedge shaped patch in cell, an oblique patch below vein 2, and elongate spots above veins 3, 4 and 6. Hind wing with elongate hyaline patch in submedian interspace and spots above veins 2 and 3. Underside of fore wing with some yellow on outer edge of subterminal spots and above vein 7.

Hab. Borneo, Kina Balu, 2 ♂, 1 ♀ type. *Exp.* 22 millim.

92 *a*. **Amata phæochyta**. (Plate I. fig. 28.)

Syntomis phæochyta, Turner, P. Linn. Soc. N. S. W. xxxi. p. 678 (1907).

Head and thorax black-brown, the back of head with yellow band, the tegulæ yellow, frons whitish; pectus with lateral yellow patches; abdomen black-brown with yellow bands on each segment, the anal tuft yellow at tip. Fore wing black-brown; a small round whitish antemedial spot in submedian interspace, small spot below origin of vein 2, and small postmedial spots above and below vein 4. Hind wing black-brown with small whitish spot below the cell near base and small spot above vein 2.

Hab. Queensland, Kuranda (*Dodd*), 1 ♂, 2 ♀. *Exp.* 30 millim.

*95 *a*. **Amata lampetis**.

Hydrusa lampetis, Turner, T. R. Soc. S. Austr. xxii. p. 94, pl. v. f. 12 (1898).

♀. Black; head and tegulæ orange-red, palpi, antennæ, and a band between their bases black; abdomen black with dorsal orange patch at base followed by five bands, the anal tuft ochreous. Fore wing shot with purple; the spots semihyaline pale reddish orange; an elongate patch below middle of cell; a small wedge-shaped patch in end of cell; an oblique maculate postmedial band between veins 3 and 7. Hind wing with rather small subbasal orange patch below the cell not conjoined to small spots above veins 2 and 3.

Hab. Queensland, Bowen. *Exp.* 35 millim. This species is unknown to me.

*95 *b*. **Amata choneutospila**. (Plate II. fig. 6.)

Syntomis choneutospila, Turner, P. Linn. Soc. N. S. W. xxix. p. 844 (1905).

♂. Head and thorax black-brown; frons and tegulæ orange; antennæ white at tips; pectus with orange patches; abdomen black-brown with seven orange bands, the anal tuft orange above. Fore wing black-brown; an elongate orange medial patch below the cell and vein 2, a quadrate spot in end of cell, and rather quadrate postmedial spots between veins 7 and 3. Hind wing black-brown;

a rather triangular orange subbasal spot below the cell and a small quadrate spot beyond the cell and point above vein 6.

Hab. Queensland, Brisbane (*Batchelor*), type † ♂ in Coll. Turner. *Exp.* 30 millim.

96. **Amata pactolina**, insert (syn.) :—

Hydrusa sphenophora, Turner, T. R. Soc. S. Austr. xxii. p. 94 (1893).

96 *a*. **Amata melaproctis.** (Plate I. fig. 29.)

Syntomis melaproctis, Hmpsn. A. M. N. H. (7) viii. p. 166 (1901).

♂. Black; antennæ white at tips; frons, a ring round neck, tegulæ, and a spot on metathorax orange-yellow; pectus with lateral orange spots; abdomen with basal orange patch on dorsum followed by six bands, the anal segment wholly black. Fore wing with wedge-shaped orange-yellow patches below base and in end of cell; a triangular patch below base of vein 2 and elongate spots above veins 3, 4, 6. Hind wing with orange basal patch in cell and on inner area widely separated from a small spot above vein 2.

Hab. Philippines, Samboangan (*J. J. Walker*), 2 ♂ type. *Exp.* 26 millim.

96 *b*. **Amata clementsi.** (Plate I. fig. 30.)

Syntomis clementsi, Hmpsn. A. M. N. H. (7) viii. p. 167 (1901).

Black; frons, back of head, tegulæ, patagia, and a patch on meta thorax deep fulvous orange; patches on pectus and stripes on fore coxæ and fore and mid femora orange; abdomen with seven orange bands in male and six in female and the extremity orange. Fore wing with subquadrate fulvous orange spots below base and in end of cell; a wedge-shaped spot below vein 2 usually with a small spot above 2, elongate spots above veins 7 and 6, the former sometimes absent, often a small spot above 5 and shorter spots above veins 4 and 3. Hind wing with basal fulvous orange patch in cell and on inner area conjoined to spots above veins 2 and 3.

Hab. W. Australia, Sherlock R. (*Dr. E. Clements*), 2 ♂, 4 ♀ type. *Exp.* 32–38 millim.

96 *c*. **Amata chroma.** (Plate I. fig. 31.)

Hydrusa chroma, Swinh. Cat. Het. Mus. Oxon. i. p. 50 (1893).
Syntomis attenuata, Hmpsn. A. M. N. H. (7) viii. p. 167 (1901).

♂. Black-brown; head, tegulæ, extremity of patagia, a spot on metathorax and lateral spots on pectus orange-yellow; abdomen with seven orange bands, the anal segment with dorsal orange spot. Fore wing with wedge-shaped orange spots below base and in end of cell; an oblique wedge-shaped spot below vein 2 and small spot above 2; elongate spots above veins 3, 4, and 6 and sometimes a

slight streak above 6. Hind wing with large orange basal patch conjoined to confluent spots above veins 2, 3.

♀. Abdomen with six bands and the anal tuft orange.

Hab. N. Australia, S. Heywood I., 1 ♂ type *attenuata*, Bathurst I., 6 ♂, 1 ♀, Queen's I., 1 ♀ (*J. J. Walker*). *Exp.* 26 millim.

*96 *d*. **Amata recedens**, Lucas, P. Linn. Soc. N. S. W. (2) vi. p. 281 (1891), is a distinct species differing from the above in the abdomen being hairy and the spots of hind wing separate.

96 *e*. Amata amœnaria. (Plate I. fig. 32.)

Syntomis amœnaria, Swinh. A. M. N. H. (7) ix. p. 418 (1902).

♂. Black; frons, tegulæ, and patches on patagia and metathorax orange; abdomen with seven orange bands, the anal tuft orange, black at sides. Fore wing with small round antemedial spot below the cell; an oblong spot in end of cell; an oblique spot below vein 2; elongate spots above veins 3 and 6, the former with small spot below its extremity, the latter with slight streak above it. Hind wing with orange patch on basal area except costa, extending on inner margin to tornus and with some fuscous scales on it near origin of vein 2; a patch beyond the cell between veins 2 and 7.

Hab. W. Australia, Roebourne, 1 ♂ type. *Exp.* 30 millim.

96 *f*. Amata trigonophora. (Plate II. fig. 1.)

Hydrusa trigonophora, Turner, T. R. Soc. S. Austr. xxii. p. 97, pl. v. f. 7 (1898).

♂. Black; head orange yellow, the palpi, antennæ, and a bar between their bases black; metathorax and pectus at sides with orange spots; abdomen with dorsal orange-yellow patch at base followed by six bands and a dorsal patch on terminal segment. Fore wing with quadrate semihyaline orange-yellow patch below base of cell; a wedge-shaped patch in end of cell; an oblique wedge-shaped patch below base of vein 2, and elongate spots above veins 3, 4, and 6 and usually a small spot above 7. Hind wing with basal orange-yellow patch in and below cell just touching a wedge-shaped patch above veins 2, 3.

♀. Abdomen with five orange-yellow bands beyond the basal patch, the anal tuft orange; hind wing with the patches separate.

Hab. Queensland, Brisbane (*Turner*), 2 ♂, 2 ♀. *Exp.* 32–40 millim.

96 *g*. Amata melitospila. (Plate II. fig. 2.)

Syntomis melitospila, Turner, P. Linn. Soc. N. S. W. xxix. p. 853 (1905).

♂. Black with a greenish gloss; head and tegulæ pale orange-yellow, the palpi, antennæ, and a band between their bases black;

patagia and metathorax with yellow patches, pectus yellow at sides; abdomen with dorsal yellow patch at base followed by six bands, the anal tuft wholly yellow. Fore wing with quadrate semihyaline yellow patch below base of cell; a wedge-shaped patch in end of cell; an oblique patch below vein 2, a spot above its base, elongate spots above veins 3, 4, and streaks above 6, 7. Hind wing with semihyaline yellow patch in and below the cell where it extends to the tornus, conjoined to spots above veins 2 and 3.

♀. Abdomen with five bands beyond the basal patch.

Hab. N. Australia, Pt. Darwin (*J. J. Walker*), 3♂, 4♀. *Exp.* ♂ 36, ♀ 38 millim.

96 *h*. **Amata xanthura.** (Plate II. fig. 3.)

Syntomis xanthura, Turner, P. Linn. Soc. N. S. W. xxix. p. 843 (1905).

♂. Head, thorax, and abdomen black; frons and tegulæ orange patagia with orange spots; metathorax with orange spot; pectus with some orange at sides; abdomen with six orange bands, the anal tuft orange. Fore wing black-brown; a quadrate orange antemedial patch below the cell and another quadrate patch in end of cell; an oblique triangular patch below base of vein 2; an elongate postmedial patch above vein 6 and more or less developed streak above vein 7; shorter patches above veins 4 and 3. Hind wing black-brown with large orange subbasal patch from below costa to inner margin slightly confluent with a patch beyond the cell from below costa where it is slightly angled inwards to vein 2.

Hab. Victoria, Sea Lake (*Goudie*), 2♂. *Exp.* 36–42 millim.

96 *i*. **Amata cingulata.** (Plate II. fig. 4.)

Hydrusa cingulata, Butl. Journ. Linn. Soc., Zool. xii. p. 352 (1876).
Hydrusa pyrocoma, Meyr. P. Linn. Soc. N. S. W. (2) i. p. 780 (1886).
Hydrusa synedra, Meyr. P. Linn. Soc. N. S. W. (2) i. p. 780 (1886).
Hydrusa hesperitis, Meyr. P. Linn. Soc. N. S. W. (2) i. p. 781 (1886).
Hydrusa mochlotis, Meyr. P. Linn. Soc. N. S. W. (2) i. p. 782 (1886).

♂. Black with a purplish gloss; head and tegulæ orange, the palpi, antennæ, and a band between their bases black; metathorax and pectus at sides with orange spots; abdomen with dorsal orange patch at base followed by six bands, the anal tuft wholly orange. Fore wing with the costal area greenish; quadrate orange patches below base and in end of cell; an oblique wedge-shaped patch below vein 2; spots above veins 3, 4, and an elongate spot above 6 sometimes with small spots above and below its extremities. Hind wing with orange patch on basal area in and below cell often with black spots on it, widely separated from a patch beyond the cell between veins 2 and 6.

♀. Abdomen with five bands beyond the basal patch.

Hab. Queensland, Moreton Bay (*Diggles*), 2♀ type, Brisbane (*Turner*), 3♂, 1♀; N. S. Wales, Sydney, 1♂, Bombala, 1♂. *Exp.* 40–52 millim.

97 *a*. Amata heptaspila. (Plate II. fig. 5.)

Syntomis heptaspila, Turner, P. Linn. Soc. N. S. W. xxix. p. 852 (1905).

♂. Black shot with purple; head and tegulæ orange; palpi, antennæ, and a band between their bases black; metathorax and pectus at sides with orange patches; abdomen with dorsal orange patch at base followed by four bands, the 1st incomplete ventrally, the three last segments black with more or less developed short dorsal bands on the 1st two and the anal tuft orange; wings with the markings semihyaline orange. Fore wing with quadrate spot below base of cell and wedge-shaped spot in its extremity; an oblique wedge-shaped patch below vein 2 and spot above its base; spots above veins 3, 4, an elongate spot above 6 with more or less developed small spots above and below its extremity. Hind wing with basal patch in and below the cell, well separated from or nearly touching spots above veins 2 and 3.

Hab. Queensland, Geraldton, 1 ♂, Townsville (*Dodd*), 1 ♂, Cairns, 1 ♂. *Exp.* 36–38 millim. Type † in Coll. Turner.

*97 *b*. Amata phepsalotis. (Plate II. fig. 13.)

Hydrusa phepsalotis, Meyr. P. Linn. Soc. N. S. W. 1886, p. 784.
Hydrusa eschatias, Meyr. P. Linn. Soc. N. S. W. 1886, p. 785.

Head and thorax black; antennæ white at tips; fore tibiæ with ochreous tuft at extremity; abdomen black with seven orange-red bands in male, six in female, the anal tuft orange at middle, black at sides. Fore wing black, the spots small, punctiform or partly obsolete, ochreous, sometimes somewhat hyaline; an antemedial spot below the cell, wedge-shaped spot in end of cell, oblique spot below vein 2 with minute spot above base of vein 2 and elongate spots above veins 6, 4, 3. Hind wing black, the spots small or partly or wholly obsolete, ochreous; a subbasal spot below the cell and small spot below the cell.

Ab. 1. *eschatias*. Both wings uniform black without spots or with single spots on fore and hind wing.

Hab. Queensland, Maryborough, Mt. Tambourine; N. S. Wales, Newcastle, Bulli, Wollongong. *Exp.* 36 millim.

97 *c*. Amata chromatica. (Plate II. fig. 7.)

Syntomis chromatica, Turner, P. Linn. Soc. N. S. W. xxix. p. 845 (1905).

Black with a purple tinge; antennæ white at tips; frons, tegulæ, and lateral patches on pectus deep orange; abdomen with dorsal orange patch at base followed by six bands and a dorsal patch on anal tuft; wings with the spots very small. Fore wing with small semihyaline orange spots below base and in end of cell; an oblique wedge-shaped spot below base of vein 2 and small spots above veins 3, 4, and 6. Hind wing with small orange spots below cell near base and above vein 2.

Hab. Queensland, Townsville, type † in Coll. Turner, Mt. Tambourine, 1 ♂, 1 ♀. *Exp.* ♂ 34, ♀ 42 millim.

*98 *a*. **Amata magistri.** (Plate II. fig. 8.)

Hydrusa aperta, Meyr. P. Linn. Soc. N. S. W. (2) i. p. 783 (1886), nec Wlk.
Syntomis magistri, Turner, P. Linn. Soc. N. S. W. xxix. p. 846 (1905).

♂. Head and thorax black-brown; frons and tegulæ orange-yellow; antennæ white at tips; pectus with yellow lateral patches; femora slightly streaked with yellow; abdomen banded black-brown and orange-yellow, the anal tuft orange-yellow. Fore wing black-brown; an orange-yellow antemedial patch in submedian interspace, a quadrate patch in cell towards its extremity, an oblique wedge-shaped patch below vein 2 with slight spot above it, an elongate spot above vein 6, minute spot above 7, and patches above veins 4, 3. Hind wing black-brown; an orange-yellow spot in base of cell conjoined to a large patch below the cell nearly confluent with patches above and below vein 3.

Hab. N. S. Wales, Bathurst, type † ♂ in Coll. Meyrick. *Exp.* 46 millim.

98 *b*. **Amata orphnœa.** (Plate II. fig. 9.)

Hydrusa orphnœa, Turner, T. R. Soc. S. Austr. xxii. p. 98 (1898).

♂. Brown-black; antennæ with the shaft more or less clothed with ochreous scales above; frons, tegulæ, a ring round neck, lateral patches on pectus, fore coxæ, and stripes on femora and tibiæ orange; abdomen hairy with orange patch on base of dorsum followed by six bands, the anal segment with dorsal orange patch; wings with thin hairy scaling. Fore wing with somewhat quadrate orange-yellow patches below base and in end of cell; a wedge-shaped patch below vein 2, spots above 3, 4, an elongate spot above 6 and small spot above 7. Hind wing with orange-yellow spot in cell conjoined to a patch below it which again is conjoined to spots above veins 2 and 3.

♀. Abdomen with five bands beyond the basal patch, the anal tuft orange and ochreous; hind wing with the basal and post-medial patches separate.

Hab. Queensland, Warwick (*Turner*), 1 ♂; Centr. Australia, Hermannsburg (*Hillier*), 1 ♂. *Exp.* 30 millim.

100 *a*. **Amata philippinensis.** (Plate II. fig. 10.)

Syntomis philippinensis, Hmpsn. A. M. N. H. (7) xix. p. 222 (1907).

♂. Head, thorax, and abdomen black-brown; frons and vertex of head orange; antennæ white at tips; tegulæ orange; patagia orange with black edges; metathorax with orange patch; pectus

and coxæ mostly orange; abdomen with orange basal patch and bands on six following segments. Fore wing black-brown; an orange-hyaline wedge-shaped patch in cell, a wedge-shaped spot below base of cell, an oblique wedge-shaped patch from below base of vein 2 to near termen, an elongate streak above vein 6 and slight streak above 7 and elongate spots above veins 4, 3. Hind wing black-brown with orange patch in and below the cell extending to near tornus and a pair of spots above and below vein 3.

♀. Vertex of head black; abdomen with five bands beyond the basal patch; fore wing with the patches above veins 4, 3 and below 2 more elongate.

Hab. Philippines, Luzon, Manila (*Fletcher*, *Ledyard*), 1 ♂, 4 ♀ type, Sta. Rosa (*Betton*), 1 ♀, Taytai (*Betton*), 1 ♀, Mindoro (*McGregor*), 1 ♂, Mindanao, Cagayancillo (*McGregor*), 1 ♂. *Exp.* 22–26 millim.

100 *b*. **Amata ticaonis.** (Plate II. fig. 11.)

Syntomis ticaonis, Hmpsn. A. M. N. H. (7) xix. p. 223 (1907).

Black-brown; antennæ white at tips; frons and tegulæ orange; pectus with lateral orange patch; fore femora and tibiæ streaked with orange; abdomen with basal orange patch followed by six bands in male, five in female. Fore wing with wedge-shaped orange-hyaline patch in end of cell, a triangular patch below base of cell, an oblique wedge-shaped patch from below base of vein 2 to near termen, an elongate streak above vein 6 sometimes with traces of a streak above 7, and elongate spots above veins 4, 3. Hind wing with orange patch in and below the cell to near tornus and pair of spots above and below vein 3.

Hab. Philippines, Ticao (*McGregor*), 3 ♂, 1 ♀ type. *Exp.* 24–28 millim.

*100 *c*. **Amata alberti.**

Amata alberti, Roths. Nov. Zool. xviii. p. 154 (1911), & xix. p. 377, pl. v. f. 7.

♂. Head and thorax black-brown with a purplish gloss; frons, back of head, tegulæ, and a patch on metathorax orange; pectus with lateral orange patches; abdomen orange with narrow black segmental bands, the anal segment black with orange dorsal spot. Fore wing black-brown with a purple gloss; a rather quadrate orange-yellow antemedial spot below the cell, quadrate patch in end of cell, oblique patch below base of vein 2 with minute spot above it, elongate spot above vein 6 with slight streak below it, and spots above and below vein 4. Hind wing orange-yellow, the costal area black confluent with a discoidal spot; the terminal area black-brown with a purple gloss, angled inwards below vein 2, and narrowing to a point at tornus.

Hab. Br. N. Guinea, Kumusi R. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

103 *a*. **Amata paraula.** (Plate 11. fig. 12.)

Hydrusa paraula, Meyr. P. Linn. Soc. N. S. W. (2) i. p. 779 (1886).

Head dull orange; palpi, antennæ, and a band between their bases black; thorax and abdomen shot with blue, the metathorax and sides of pectus with orange patches; abdomen with dorsal orange patch at base followed by four bands, the anal tuft orange above, the ventral surface black; wings with a greenish tinge, the markings dull semihyaline orange. Fore wing with quadrate patch below base of cell, a wedge-shaped patch in end of cell; an elongate oblique patch below vein 2 not reaching termen, spots above base of vein 2 and above veins 3, 4; an elongate spot above 6 with small spots above and below its extremities. Hind wing with basal patch in and below the cell separated from spots above veins 2, 3.

♀. Abdomen with the bands complete on ventral surface.

Hab. Queensland, Townsville, Rockhampton, 1 ♀. *Exp.* 40 millim.

106 *a*. **Amata sublutea.**

Hyalæthea sublutea, Beth.-Baker, Nov. Zool. xv. p. 180 (1908).

Fore and mid tibiæ of male and the fore tarsi with thick fringes of hair; hind wing of male with the apex produced and acute, vein 7 anastomosing with 5 towards termen.

Head and thorax black, the patagia orange; fore legs fringed with orange hair; abdomen black with five orange bands. Fore wing black, the cell, submedian interspace, streaks above and below

Fig. 5.—*Amata sublutea*, ♂. ½.

vein 7, between veins 5 and 2 and below terminal part of vein 1 hyaline leaving a black streak between veins 6 and 5 and a terminal band expanding at apex and below vein 3. Hind wing orange with terminal black band expanding at apex.

Hab. Br. N. Guinea, Owgarra (*Meek*) 1 ♂, 1 ♀. *Exp.* 38 millim. Type † in Coll. Bethune-Baker.

108. **Amata leucerythra**, insert

Syntomis rubicunda, Mab. Bull. Soc. Ent. Fr. 1892, p. cxxxix,

which has precedence, and

No. 118. *Syntomis divalis*, Schaus, which is the male of the species.

109. **Amata trifenestrata**, insert (syn.) :—

Amata henrici, Roths. Nov. Zool. xvii. p. 437 (1910), & xix. p. 376, pl. iv. f. 4.

Damma I. (*Kühn*), type † ♀ in Coll. Rothschild.

110 *a*. Amata miozona.

Syntomis miozona, Hmpsn. P. Z. S. 1910, p. 389, pl. xxxvi. f. 2.

♀. Head, thorax, and abdomen deep metallic green; frons pure white; antennæ white at tips; pectus with lateral crimson patches; basal joint of tarsi white; abdomen with dorsal crimson patch at base. Fore wing deep metallic green; a hyaline patch below base of cell, wedged-shaped patch in end of cell, oblique patch below vein 2 and elongate patches above vein 6 and below veins 4 and 3; cilia white below apex. Hind wing deep metallic green with hyaline patches below the cell and beyond the cell between veins 4 and 2.

Hab. N.E. Rhodesia, Fort Jameson (*Neave*), 1 ♀ type; Mashonaland, Salisbury (*Marshall*), 2 ♀. *Exp.* 40 millim.

Subsp. 1. Wings more purplish black except costal area of fore wing; cilia not white below apex.

Hab. Germ. E. Africa, Magila, 3 ♀. *Exp.* 30 millim.

110 *b*. Amata croceizona.

Syntomis croceizona, Hmpsn. P. Z. S. 1910, p. 389, pl. xxxvi. f. 3.

♀. Head, thorax, and abdomen black shot with metallic green; tarsi with the basal joint white; abdomen with orange-red dorsal patch at base. Fore wing black shot with purple, the costal area with a metallic green tinge; a small hyaline spot below the cell near base, a quadrate patch in end of cell, an oblique patch below vein 2 and elongate spots above vein 6 and below veins 4 and 3; cilia white towards apex. Hind wing black shot with purple, a hyaline patch below the cell and small spot between veins 4, 3.

Ab. 1. Wings shot with metallic green instead of purple.

Hab. N.W. Rhodesia, Alala plateau (*Neave*), 4 ♀; N.E. Rhodesia, Bangweolo Distr. (*Neave*), 1 ♀, Kolungwisi Valley (*Neave*), 2 ♀ type. *Exp.* 30 millim.

111 *a*. Amata consimilis. (Plate II. fig. 14.)

Syntomis consimilis, Hmpsn. A. M. N. H. (7) viii. p. 167 (1901).

Black shot with metallic blue-green; antennæ white at tips; neck cupreous red at sides; pectus with cupreous lateral patches; fore coxæ white in front; abdomen with cupreous dorsal patch at base, conjoined lateral spots on 1st five segments and usually obsolescent dorsal bands on 4th and 5th segments. Fore wing

with rounded or quadrate hyaline spot below the cell near base; a patch in end of cell; an oblique patch below vein 2; elongate spots above veins 6, 4, and 3 and sometimes a small spot above vein 5. Hind wing with hyaline patch in and below the cell and a patch beyond the cell between veins 2 and 5.

Hab. Br. E. Africa, Nairobi (*Betton*), 1 ♂, Kikuyu, Roromo, 1 ♂, Fort Smith (*Crawshay*), 1 ♂, 1 ♀ type. *Exp.* 24 millim.

111 *b*. Amata villiami.

Amata villiami, Roths. Nov. Zool. xvii. p. 433 (1910), & xix. p. 376, pl. iii. f. 47.
Syntomis dissimilis, Beth.-Baker, A. M. N. H. (8) vii. p. 530 (1911).

Head, thorax, and abdomen black suffused with metallic blue, the last with some cupreous red at base and dorsal bands on 4th and 5th segments and lateral spots on 2nd and 3rd segments. Fore wing black suffused with metallic blue; quadrate hyaline patches below the cell before middle and in end of cell, an oblique patch below vein 2, and elongate postmedial spots above veins 6, 4, 3. Hind wing black suffused with metallic blue; a hyaline patch below the cell and patch beyond the cell between veins 5 and 2.

Differs from *S. consimilis* in the antennæ not being white at tips.

Hab. Br. E. Africa, Nairobi (*Betton*), 1 ♂, Escarpment (*Doherty*), type † ♂ in Coll. Rothschild, Laikipia (*Jackson*), type † ♀ *dissimilis* in Coll. Bethune-Baker. *Exp.* 30 millim.

112 *a*. Amata cuprizonata. (Plate II. fig. 15.)

Syntomis cuprizonata, Hmpsn. A. M. N. H. (7) viii. p. 168 (1901).
Syntomis phæozona, Zerny, Iris, xxvi. p. 119 (1912).

Black shot with metallic blue; neck with cupreous red ring; pectus with cupreous lateral patches; abdomen with cupreous dorsal patch at base, bands on 4th, 5th and 6th segments except on ventral surface and lateral spots and a few scales on dorsal area on 2nd and 3rd segments. Fore wing with antemedial quadrate hyaline patch below the cell; a patch in end of cell; an oblique patch below base of vein 2; elongate spots above veins 6, 4, and 3 and a small spot above 5. Hind wing with elongate spot in cell, a patch below the cell and a patch beyond it above veins 2 and 3.

Hab. Br. E. Africa, Roromo, Kikuyu (*Crawshay*), 1 ♀ type, Escarpment (*Neave*), 2 ♂, 5 ♀; Uganda, Kiduha (*Jack*), 1 ♂, Ruwenzori (*Neave*), 1 ♀; Germ. E. Africa, Usambara, Bukoba (*Grauer*), type † ♀ *phæozona* in Mus. Vienna. *Exp.* 24 millim.

114. **Amata alicia**, insert (syns.) :—

Syntomis alicia, var. *mogadorensis*, Blachier, Ann. Soc. Ent. Fr. 1908, p. 219, pl. 4. f. 9.

Morocco, Mogador.

Syntomis alicia, var. *apicalis*, Strand, Ent. Rundschau, xxvi. p. 109 (1909).

Germ. E. Africa, Tabora.

Syntomis damarensis, Grünb. Denk. Med. Ges. Jena, xvi. p. 122, pl. iii. f. 6 (1910).

Germ. S.W. Africa.

114 *a*. **Amata endocrocis**. (Plate II. fig. 16.)

Syntomis endocrocis, Hmpsn. A. M. N. H. (7) xi. p. 338 (1903).

♀. Black suffused with brilliant blue; antennæ white at tips; pectus with lateral scarlet patches; abdomen with scarlet dorsal patch at base and dorsal and lateral bands on 3rd, 4th, and 5th segments. Fore wing with the costal area metallic green; a hyaline patch below base of cell with its lower part orange; a wedge-shaped patch in end of cell and oblique patch below vein 2; an elongate patch above vein 6 and patches above veins 3 and 4. Hind wing with a patch below base of cell, its upper part hyaline, its lower part orange; a patch above vein 2 and point above 5.

Hab. Congo, Katanga, Kambove (*Neave*), 2 ♀; Mashonaland, Salisbury (*Marshall*), 4 ♀ type. *Exp.* 40 millim.

115. **Amata tomasina**, insert (syn.) :—

Amata stictoptera, Roths. Nov. Zool. xvii. p. 432 (1910).

A form with the spots rather small.

Ivory Coast, Bondoukou (*Pemberton*), type † ♀ in Coll. Rothschild.

115 *a*. **Amata phæobasis**. (Plate II. fig. 17.)

Syntomis phæobasis, Hmpsn. A. M. N. H. (7) xix. p. 223 (1907).

♀. Head and thorax black shot with metallic green; antennæ white at tips; fore coxæ, 1st joint of fore and mid tarsi and 1st three joints of hind tarsi white; abdomen metallic green, the three medial segments dorsally brilliant blue with scarlet bands. Fore wing black shot with blue, the base, basal half of cell, and costal area metallic green; a small quadrate hyaline antemedial spot below the cell, a larger spot in end of cell, an oblique narrow spot below base of vein 2, and small elliptical postmedial spots above veins 6, 4, 3. Hind wing black shot with blue; a bar-shaped

hyaline antemedial spot below the cell and a small round spot beyond lower angle.

Hab. Uganda, Entebbe (*Neave*), 1 ♀, Nsadzi I. (*E. A. Minchin*), 1 ♀ type. *Exp.* 32 millim.

115 *b*. **Amata rubritincta.** (Plate II. fig. 18.)

Syntomis rubritincta, Hmpsn. A. M. N. H. (7) xi. p. 338 (1903).

Head, thorax, and abdomen black shot with blue-green; antennæ white at tips; patagia with some reddish-brown hair; pectus with cuprous red patches; frons, coxæ of male, and parts of tibiæ and tarsi ochreous white; abdomen with dorsal scarlet band on 1st segment and dorsal and lateral bands on 3rd, 4th, and 5th; wings shot with purple, the costal area of fore wing with green, the patches reddish hyaline. Fore wing with the inner area cupreous red to beyond middle; a patch below base of cell; a wedge-shaped patch in end of cell; an oblique patch below vein 2 extending nearly to termen; an elongate patch above vein 6 and patches above veins 3, 4. Hind wing with the basal half reddish hyaline, on inner area extending nearly to tornus; a rounded postmedial patch above veins 2 and 3; cilia brownish towards tornus.

Hab. Br. E. Africa, Londiani (*Betton*), 4 ♂, 4 ♀ type, L. Nairasha (*Neave*), 1 ♂; Uganda, W. Antrole (*Neave*), 1 ♀; Germ. E. Africa, Usangu Distr. (*Neave*), 1 ♂, 1 ♀. *Exp.* 36 millim.

124 *a*. **Amata tigrina,** Wlk. trans. from *Trichæta* no. 53.

*124 *b*. **Amata elvesi.**

Amata elvesi, Roths. Nov. Zool. xvii. p. 432 (1910), & xix. p. 375, pl. iii. f. 34.

Syntomis tigrina, Hmpsn. Moths Ind. i. p. 218 (nec Wlk.).

♂. Head, thorax, and abdomen orange-yellow; antennæ blackish; tibiæ and tarsi suffused with brown; abdomen with narrow black bands on each segment. Fore wing yellow, the veins and margins narrowly blackish; traces of a blackish line across middle of submedian interspace. Hind wing yellow, the termen very narrowly blackish; the underside with the costa narrowly blackish.

Hab. Burma (*Adamson*), type ♂ in Coll. Rothschild. This is very possibly the male of *A. tigrina*.

*128 *a*. **Amata snelleni.**

Amata snelleni, Roths. Nov. Zool. xvii. p. 432 (1910), & xix. p. 375, pl. iii. f. 35.

♀. Head orange-yellow, the vertex of head, antennæ and palpi black-brown, the antennæ white at tips; tegulæ orange-yellow; thorax black-brown mixed with orange-yellow; fore coxæ and hind legs on inner side yellowish white; abdomen black-brown with

orange-yellow bands on each segment. Fore wing black-brown; a diffused orange-yellow streak below basal half of costa; the area below the cell orange-yellow to above vein 2 and to near termen with black-brown spots below median nervure near base and at middle, and a streak on terminal part of vein 1; a rather quadrate orange-yellow patch in end of cell and elongate spots above veins 6, 4, 3. Hind wing orange-yellow; a black-brown discoidal spot conjoined to a fascia on costa; a terminal black-brown band, broad at costa, narrowing to a point at tornus and emitting a wedge-shaped patch below vein 2 almost to the cell.

Hab. E. Java, type † ♀ in Coll. Rothschild. *Exp.* 32 millim. This is very probably a variety of *A. pfeifferæ*.

128 *b*. **Amata flava.** (Plate II. fig. 19.)

Syntomis lucerna, flava, Wileman, Entom. 1910, p. 221.

Head and thorax black-brown, the frons with yellow patch; antennæ white at tips; the pro- and metathorax with orange patches, the pectus with orange patches at sides; abdomen black with seven orange bands and an obsolescent dorsal patch on anal segment. Fore wing black-brown; an orange spot at base, quadrate subbasal spot below the cell, wedge-shaped patch in end of cell, oblique patch below vein 2, an elongate spot below vein 7 with minute spot above it, and spots below veins 5 and 4. Hind wing black-brown; an orange patch below the cell confluent with a patch above 2 and small spot above vein 3.

Hab. Formosa, Banshoryo (*Wileman*), type † ♂ in Coll. Wileman, Kanshirei (*Wileman*), 4 ♀. *Exp.* 40 millim.

*128 *c*. **Amata aurantiifrons.**

Amata aurantiifrons, Roths. Nov. Zool. xviii. p. 154 (1911), & xix. p. 377, pl. v. f. 14.

♂. Head and thorax black; frons and patches on pro- and metathorax orange; antennæ white at tips; pectus with lateral orange patches; tarsi whitish at base; abdomen black with orange bands on each segment, the anal segment with dorsal orange patch. Fore wing black; some orange at base; a wedge-shaped semihyaline orange patch in end of cell; an antemedial orange patch below the cell slightly conjoined to an oblique patch below vein 2; an elongate patch above vein 6 and short streak above vein 7; orange patches above and below vein 4. Hind wing black; an orange patch below the cell conjoined to a patch above vein 2 and small spot above vein 3; a small spot in the cell above origin of vein 2. Underside of fore wing with yellow streak above basal half of inner margin.

Hab. Formosa, Tainan, type † ♂ in Coll. Rothschild. *Exp.* 46 millim.

130 *a*. **Amata xanthostidsa**, n. sp. (Plate II. fig. 20.)

♀. Head, thorax, and abdomen black-brown; tegulæ orange-yellow; frons, pectus, and coxæ mostly yellow; abdomen with yellow bands on each segment. Fore wing black-brown irrorated with yellow: a quadrate yellow subbasal patch below the cell, a patch in end of cell with its outer edge rather excised, an oblique patch below vein 2, an elongate patch above vein 6, and confluent patches above and below vein 4. Hind wing black-brown; a yellow patch below the cell, a rounded patch between veins 2 and 3.

Hab. Philippines, Manila (*Ledyard*), 1 ♀ type. *Exp.* 30 millim.

*130 *b*. **Amata punctata.** (Plate II. fig. 21.)

Hydrusa punctata, Semp. Reise Phil., Schmett. ii. p. 421 (1898).

♀. Black-brown; antennæ white at tips; frons and tegulæ orange-yellow; patagia with yellow spots, the thorax with slight dorsal yellow streak; pectus with yellow patches; abdomen with narrow yellow bands on each segment. Fore wing black-brown; the spots rather small; a subbasal orange-yellow spot below the cell, rather quadrate spot in end of cell, bar-shaped spot below vein 2, and spots above vein 6 and above and below vein 4. Hind wing black-brown with rather small orange-yellow spot below base of cell and spot above base of vein 2.

Hab. Philippines, N.E. Luzon, type † ♀ in Coll. Semper. *Exp.* 30 millim.

*130 *c*. **Amata quadripunctata.**

Amata quadripunctata, Roths. Nov. Zool. xvii. p. 433 (1910), & xix. p. 375, pl. iii. f. 36.

♂. Head and thorax black-brown; frons, tegulæ, and spots on shoulders and metathorax yellow; pectus with some yellow; fore coxæ and tarsi towards base yellow; abdomen black-brown with orange-yellow bands on each segment. Fore wing black-brown; an orange-yellow spot below the cell near base, elliptical spot in end of cell, narrow oblique bar below base of vein 2, and minute spots above and below vein 4. Hind wing black-brown with the base orange-yellow.

Hab. Sumatra, Padang, Sidempœan (*Ericsson*), type † ♂ in Coll. Rothschild. *Exp.* 28 millim.

*130 *d*. **Amata assamica.**

Amata khasiana, Roths. Nov. Zool. xvii. p. 435 (1910), nec Butl. 1876.
Amata assamica, Roths. Nov. Zool. xix. p. 375, pl. iii. f. 21 (1912).

♀. Head and thorax black-brown; tegulæ yellow; antennæ white at tips; pectus with yellow patches; tarsi white at base; abdomen black-brown with six yellow bands. Fore wing black-brown wth semihyaline orange spots; a quadrate antemedial spot

below the cell, spot in end of cell, oblique spot below vein 2, small spot above vein 7, and spots above veins 6, 4, 3, Hind wing black-brown with semihyaline orange spot below the cell and conjoined spots above veins 2 and 3.

Hab. Assam, Khásis, type † ♀ in Coll. Rothschild. *Exp.* 32 millim.

132 *a*. **Amata cholmlei.** (Plate II. fig. 22.)

Syntomis cholmlei, Hmpsn. A. M. N. H. (7) xix. p. 223 (1907).

Black suffused with brilliant metallic blue; shoulders with orange spots; fore femora and tibiæ slightly streaked with orange; abdomen with dorsal orange patch on basal segment, lateral orange patches on 2nd and 3rd segments and dorsal bands on 4th and 5th segments. Fore wing with oblong semihyaline orange subbasal patch below the cell, an oblong patch in end of cell, an oblique wedge-shaped patch below base of vein 2, and postmedial patches above veins 6, 4, 3. Hind wing with almost basal semihyaline orange patch in and below the cell and on inner area and a rounded patch beyond the cell above and below vein 4.

Hab. Br. E. Africa, Mola (*Cholmley*), 3 ♂, 2 ♀ type. *Exp.* 28–30 millim.

132 *b*. **Amata flaviguttata.**

Syntomis flaviguttata, Hmpsn. J. Bomb. Nat. Hist. Soc. xiii. p. 50, pl. B. f. 2 (1900).

♂. Blue-black; antennæ white at tips; pectus with orange spots; abdomen with orange dorsal spot on 1st segment and band on 5th segment. Fore wing with elliptical orange spot below base of cell; a quadrate spot in end of cell; an oblique eliptical spot below vein 2 and spots above veins 3, 4, and 6. Hind wing with orange patch below and beyond the cell extending to near termen, its outer edge angled above vein 2.

Hab. Chitral, Jhela Drosh (*Capt. S. W. Harris*), 2 ♂ type. *Exp.* 28 millim.

132 *c*. **Amata xanthograpta.** (Plate III. fig. 6.)

Syntomis xanthograpta, Hmpsn. ined.

♂. Head and thorax black; pectus with lateral yellow patches; abdomen black with yellow dorsal patch on 1st segment and band on 5th segment. Fore wing black tinged with green; a small yellow subbasal spot below the cell, quadrate spot in end of cell and spot below base of vein 2, a small spot above vein 6 and spot from vein 5 to just below 3 divided by black streaks on the veins. Hind wing black with a greenish tinge; minute yellow spots below base and extremity of cell with a lunulate spot between them on inner margin and rounded spot between veins 2 and 3.

Hab. Kashmir, Gund (*Avinoff*), 1 ♂ type. *Exp.* 28 millim.

*136 *a*. Amata connectens.

Amata connectens, Roths. Nov. Zool. xvii. p. 433 (1910), & xix. p. 375, pl. iii. f. 37.
Syntomis sladeni, Hmpsn. Moths Ind. i. p. 217 (part.), nec Moore.

♀. Head, thorax, and abdomen yellow; antennæ and palpi black-brown; abdomen with narrow black-brown bands on each segment; pectus, legs, and ventral surface of abdomen dark brown, the fore coxæ yellow. Fore wing yellowish hyaline, the veins and margins narrowly black-brown; slight yellowish streaks below base of costa and above base of inner margin; a small black discoidal lunule; the black-brown on termen expanding somewhat at apex and above vein 5. Hind wing hyaline, the veins and margins narrowly black-brown.

Hab. Burma, Bernardmyo (*Doherty*), type † ♀ in Coll. Rothschild. *Exp.* 34 millim.

*136 *b*. Amata flavolavata.

Amata flavolavata, Roths. Nov. Zool. xvii. p. 434 (1910), & xix. p. 375, pl. iii. f. 24.

♀. Head and thorax black-brown faintly tinged with blue; frons, tegulæ, patagia, and metathorax yellow; pectus with yellow patches; coxæ yellow; abdomen black-brown tinged with blue, with broad yellow bands on each segment and the extremity yellow. Fore wing hyaline, the veins and margins black-brown; a yellow streak below costa to beyond middle and yellow fascia above inner margin; a black-brown discoidal bar; the narrow terminal band expanding slightly at apex and at the veins. Hind wing hyaline, the veins and margins narrowly black-brown, the inner margin with some yellow; the underside with the costal area yellow.

Hab. Assam, Khásis, type † ♀ in Coll. Rothschild. *Exp.* 54 millim. This may be a variety of *A. melæna*.

137. Amata confluens.

Syntomis acrospila, Leech, Trans. Ent. Soc. 1898, p. 322 (nec Feld.).
Syntomis acrospila, var. *confluens*, Leech, Trans. Ent. Soc. 1898, p. 322.
Amata leechi, Roths. Nov. Zool. xvii. p. 433 (1910), & xix. p. 375, pl. iii. f. 23.

*137 *a*. Amata acrospila.

Syntomis acrospila, Feld. Reis. Nov. pl. 102. f. 11 (1875).

♀. Head and thorax dark brown; antennæ black; frons white; prothorax and pectus at sides with ochreous patches; tarsi whitish at base; abdomen dark brown, a yellowish patch at base of dorsum and segments 2 to 6 with yellowish bands, the ventral surface with yellowish bands on 5th and 6th segments and some yellowish

at extremity. Fore wing black-brown; some ochreous at base of costa, a quadrate subbasal hyaline patch below the cell, an elongate patch in end of cell and oblique patch below vein 2; elongate hyaline spots above veins 6, 4, 3; a white patch on termen just below apex. Hind wing black-brown; a hyaline patch below the cell conjoined to a patch above veins 2 and 3, and a slight spot in the cell above origin of vein 2.

Hab. China, Shanghai, type † ♀ in Coll. Rothschild. *Exp.* 50 millim.

138. **Amata grotei**, insert (syn.):—

Syntomis aureola, Swinh. A. M. N. H. (7) ix. p. 78 (1902).

A form with the hyaline markings of the wings rather reduced. Assam, Khásis, 2 ♀ type.

138 *a*. **Amata interrupta.** (Plate II. fig. 23.)

Syntomis interrupta, Wileman, Entom. xliii. p. 220 (1910).

Head and thorax black, the frons, tegulæ, patagia, and a pair of spots on metathorax orange; antennæ white at tips; pectus at sides and coxæ with orange patches, the 1st joint of tarsi white; abdomen black with orange bands on each segment. Fore wing black; slight yellow streaks below antemedial part of costa and on vein 1; a quadrate hyaline subbasal patch below the cell, large wedge-shaped patch in end of cell, oblique patch below vein 2 with spot above its base, elongate patch below vein 7 and small spot above 7 and spots below veins 5 and 4. Hind wing black, the inner area yellow; a hyaline patch below the cell confluent with a small spot in lower part of cell and patches above veins 3 and 2, edged on outer side by yellow.

Hab. Formosa (*Wileman*), 1 ♀, Garambi (*Wileman*), type † ♂ in Coll. Wileman; Hongkong (*Lloyd*), 1 ♀. *Exp.* 38 millim.

140 *a*. **Amata lucerna.** (Plate II. fig. 24.)

Syntomis lucerna, Wileman, Entom. xliii. p. 321 (1910).

Head and thorax black; frons with orange patch; antennæ white at tips; pro- and metathorax with orange patches, the pectus with orange patches at sides; abdomen black with seven orange bands and dorsal patch on anal segment. Fore wing black; an orange spot at base and obsolescent streak below costa; a quadrate hyaline subbasal patch below the cell, wedge-shaped patch in end of cell, oblique patch below vein 2, elongate patch below vein 7 with small mark above it and spots below veins 5 and 4. Hind wing black; a hyaline patch below the cell with some yellow on its lower edge, a small spot in lower part of cell, patch above vein 2 and small spot above vein 3.

Hab. Formosa, Kanshirei (*Wileman*), 1 ♀. *Exp.* 46 millim. Type † ♂, ♀ in Coll. Wileman.

142. Amata fervida, insert:—

Syntomis verecunda, Swinh. A. M. N. H. (7) ix. p. 78 (1902).

A form with a black bar across submedian interspace of fore wing.

Assam, Jaintia Hills, 1 ♂ type.

Syntomis aurea, Swinh. A. M. N. H. (8) i. p. 62 (1908).

Similar but fore wing with black fascia between veins 6 and 5.

Assam, Khásis, 1 ♂, 1 ♀ type.

*150 *a*. Amata vilemani.

Amata vilemani, Roths. Nov. Zool. xviii. p. 154 (1911), & xix. p. 377, pl. v. f. 21.

♂. Head black with some white hair and metallic blue on vertex, the frons white; antennæ white at tips; thorax white, the base of patagia black-brown; legs brown with some whitish mixed; abdomen white with blue-black bands on each segment and the extremity blue-black. Fore wing hyaline; the veins and margins black-brown with some whitish scales; a black discoidal bar; some white before termen towards apex and tornus. Hind wing hyaline, the veins and margins black-brown; some white below costa and before termen.

Hab. Formosa, Tainan, type † ♂ in Coll. Rothschild. *Exp.* 50 millim.

*150 *b*. Amata yunnanensis.

Amata yunnanensis, Roths. Nov. Zool. xviii. p. 155 (1911), & xix. p. 377, pl. v. f. 25.

♂. Head and thorax blue-black; frons ochreous; tegulæ with small orange spots; patagia with orange patches; metathorax with slight lateral orange marks; antennæ white at tips; pectus with lateral orange patches; fore coxæ with yellow patches; the tarsi whitish at base; abdomen black glossed with brilliant blue and with orange-yellow bands except on terminal segment. Fore wing hyaline, the veins and margins black; the inner margin with some yellow above it at base and a small hyaline mark before tornus; the terminal band expanding on apical area and between veins 3 and 2. Hind wing hyaline, the veins and margins black; some yellow above base of inner margin; the black on costa expanding into a discoidal spot; the terminal black band angled inwards below vein 2.

Hab. Yunnan, Tali, type † ♂ in Coll. Rothschild. *Exp.* 44 millim.

153. **Amata perixanthia**, insert:—

Amata perixanthia, sinensis, Roths. Nov. Zool. xvii. p. 435 (1910), & xix. p. 375, pl. iii. f. 17.

Much larger; markings of head, thorax, and abdomen yellow instead of orange, the last with the bands narrower; wings with the hyaline spots more strongly defined by yellow.

W. China, type † in Coll. Rothschild.

*155 *a*. **Amata oustoni.**

Amata oustoni, Roths. Nov. Zool. xviii. p. 155 (1911), & xix. p. 377, pl. v. f. 6.

♂. Head and thorax brown, the frons, tegulæ, and patches on patagia yellow; antennæ white at tips; pectus with yellow lateral patches; tarsi with the 1st joint yellow; abdomen brown with yellow bands on each segment, the extremity dark. Fore wing brown; an antemedial hyaline patch below the cell, a wedge-shaped patch in end of cell, oblique patch below vein 2 and patches beyond the cell above veins 6, 4, 3, 2. Hind wing brown with a hyaline patch below the cell and spots above bases of veins 3 and 2.

Hab. Hainan, Mt. Wuchi, type † ♂ in Coll. Rothschild, Youboi; Yunnan. *Exp.* 26 millim.

*156 *a*. **Amata palanana.** (Plate II. fig. 25.)

Syntomis palanana, Semp. Reise Phil., Schmett. ii. p. 419 (1898).

Black; frons yellow; tegulæ yellow at sides; pectus with two yellowish patches; abdomen with dorsal yellow patch on 1st segment and each segment slightly fringed with yellow. Fore wing with rounded spot below base of cell; an oblique triangular spot below vein 2; a wedge-shaped spot in end of cell; small spots between veins 3 and 5 and an elongate spot above vein 6. Hind wing with spot below base of cell and small spots between bases of veins 2 and 5.

Hab. Philippines, N.E. Luzon, Palanan, type † ♂, ♀ in Coll. Semper, Minanga. *Exp.* 30 millim.

157 *a*. **Amata jancouscyi.**

Amata jankowskyi, Roths. Nov. Zool. xvii. p. 434 (1910), & xix. p. 375, pl. iii. f. 18.

♂. Head and thorax black-brown; tegulæ yellow; pectus with lateral yellow patches; abdomen black-brown with dorsal and lateral yellow bands on each segment, the ventral surface with yellow bands on 4th and 5th segments. Fore wing black-brown; a quadrate hyaline antemedial spot below the cell, oblong patch in

end of cell, oblique patch below the cell, and elongate spots above veins 6, 4, 3. Hind wing black-brown; a hyaline patch below the cell with a few yellow scales at inner margin conjoined to spots above veins 2 and 3.

Ab. 1. Fore wing with hyaline spot above base of vein 2.

Hab. C. China, Foo-chow (*de la Touche*), 1 ♂, Ichang (*Pratt*), 1 ♂; W. China, Kwei-chow, 1 ♂, 1 ♀. *Exp.* 40 millim. Type † ♂ in Coll. Rothschild. This may be a variety of *A. torquata*.

*162 *a*. Amata fruhstorferi.

Amata fruhstorferi, Roths. Nov. Zool. xvii. p. 435 (1910), & xix. p. 375, pl. iii. f. 26.

♀. Head, thorax, and abdomen black-brown faintly tinged with blue; frons white; antennæ white at tips; pectus with yellow patches; tarsi white at base; abdomen with orange bands on four basal segments, the bands on 2nd and 3rd segments narrower. Fore wing black-brown; a conical hyaline patch below the cell near base, a wedge-shaped patch in cell, an oblique patch below vein 2 extending to near termen and with its inner edge indented, an elongate spot above vein 6 with small spot above vein 7, elongate spots above veins 4, 3, and shorter spot above vein 2. Hind wing black-brown; a hyaline patch below the cell with some yellow at inner margin, conjoined to a patch above veins 2 and 3; a minute hyaline spot in cell above origin of vein 2; the underside with yellow streak on basal half of costa.

Hab. Tonkin, Manson Mts. (*Frühstorfer*), type † ♀ in Coll. Rothschild. *Exp.* 42 millim.

164 *a*. Amata chloroscia. (Plate II. fig. 26.)

Syntomis chloroscia, Hmpsn. A. M. N. H. (7) viii. p. 168 (1901).

♀. Head, thorax, and abdomen black tinged with golden green; frons, tegulæ, upper edge of patagia, patches on pectus, coxæ, and femora above pale yellow; abdomen with dorsal patch on 1st segment, lateral band on 2nd and complete bands on 3rd, 4th, and 5th segments pale yellow. Fore wing blue-black, the costa and inner margin tinged with golden green; some yellow at base of inner margin; wedge-shaped hyaline spots below base and in end of cell; an elongate spot below vein 2 dilated at basal end and extending to near termen; a streak above vein 6 and short streak above 7, and elongate spots above veins 3 and 5. Hind wing with hyaline patch in and below the cell extending to near tornus and tinged with yellow at base and on inner margin; a patch beyond the cell between veins 2 and 5.

Hab. Br. E. Africa, Athi-ya-Mawe (*Betton*), 1 ♀ type. *Exp* 30 millim.

168 *a*. **Amata symphona.** (Plate II. fig. 27.)

Syntomis symphona, Swinh. A. M. N. H. (7) xix. p. 201 (1907).

♀. Head, thorax, and abdomen black; palpi yellow at base; frons yellow with a black patch; antennæ white at tips; tegulæ yellow edged with black; paired yellow patches on patagia, pro- and metathorax; pectus and coxæ with yellow patches; abdomen with yellow patch at base, bands on 5th and 6th segments and slight dorsal bars at base of 3rd and 4th segments, the anal tuft with some yellow hairs. Fore wing black; a slight yellow streak below base of costa and a fascia above middle of inner margin; a hyaline patch below base of cell with some yellow on its inner edge; a large hyaline patch in cell, elongate patches above veins 7, 6, 4, 3, and above and below 2, and a small spot above vein 5 near termen. Hind wing yellow with black terminal band extending on costa to middle and expanding as a large patch below vein 2 to middle of wing.

Hab. N. Borneo, Tenom, 1 ♀ type. *Exp.* 32 millim.

*169 *a*. **Amata entebi.** (Plate II. fig. 28.)

Syntomis n'tebi, Beth.-Baker, A. M. N. H. (8) vii. p. 531 (1911).

♀. Head, thorax, and abdomen black-brown suffused with metallic green; antennæ white at tips; abdomen with dorsal orange bands on 3rd, 4th, and 5th segments. Fore wing black-brown, the costa and base of cell suffused with metallic green; a small round hyaline antemedial spot below the cell, a spot in end of cell, oblique spot below vein 2, and elongate postmedial spots above veins 6, 4, 3. Hind wing black-brown; a round hyaline spot below middle of cell, and postmedial spot between veins 3 and 2.

Hab. Uganda, Entebbe (*Jackson*), type † ♀ in Coll. Bethune-Baker. *Exp.* 34 millim.

172 *a*. **Amata elongata.** (Plate II. fig. 29.)

Syntomis elongata, Hmpsn. J. Bomb. Nat. Hist. Soc. xiii. p. 50 (1900).

♂. Grey-brown, frons and back of head orange; antennæ white at tips; tarsi with the 1st joint white; abdomen with orange dorsal patch on 1st segment and band on 5th. Fore wing with quadrate hyaline spot in end of cell; a small spot below base of cell and bar-shaped spot below middle of it; points above bases of veins 2, 3, and 6; an orange spot on termen below apex. Hind wing with small hyaline spot below the cell.

Ab. 1. Much browner; the hyaline spots larger, especially those below the cell and above veins 2, 3, and 6; hind wing with small spot above base of vein 3.—Kanara.

Hab. Bombay, Kanara (*S. N. Ward*), 1 ♀; Madras, Belgaum (*Baddek*), 1 ♂; Travancore, Pirmád, 3500 ft. (*H. G. Place, R. S. Imray*), 3 ♂, 2 ♀ type. *Exp.* 34–42 millim.

175. Amata edvardsi, insert (syn.) :—

Syntomis taiwana, Miyake, Annot. Zool. Jap. vi. 2, p. 81 (1907).

175 *a*. Amata congener. (Plate II. fig. 31.)

Syntomis congener, Hmpsn. A. M. N. H. (7) viii. p. 168 (1901).

♀. Blue-black; antennæ white at tips; tegulæ, except at middle and sides of neck, orange; pectus with lateral orange patches; abdomen with dorsal orange patch on 1st segment, lateral spots on 1st four segments and band on 5th segment except on ventral surface. Fore wing with rounded hyaline spot below the cell near base; a quadrate spot in end of cell; an oblique spot below base of vein 2; elongate spots above veins 6, 4, 3. Hind wing with hyaline patch below the cell and round spot between veins 2 and 3.

Hab. Br. E. Africa, Kikuyu, Ruarka R., 5,500 ft. (*Crawshay*), 1 ♀ type. *Exp.* 36 millim.

175 *b*. Amata attenuata.

Amata attenuata, Roths. Nov. Zool. xvii. p. 437 (1910), & xix. p. 375, pl. iii. f. 29.

Head, thorax, and abdomen brownish black; antennæ white at tips; tegulæ yellow at base; abdomen with yellow bands on 1st and 5th segments except on ventral surface. Fore wing brownish black; a rounded hyaline subbasal patch below the cell, a quadrate patch in the cell towards its extremity, oblique patch below base of vein 2, and elliptical spots above veins 6, 4, 3. Hind wing brownish black; a hyaline patch below the cell edged by yellow towards inner margin, and a round spot between veins 3 and 2.

Hab. Br. E. Africa, Escarpment (*Doherty*), 2 ♂. *Exp.* 24–28 millim. Type † ♂, ♀ in Coll. Rothschild.

*184 *a*. Amata pseudextensa.

Amata pseudextensa, Roths. Nov. Zool. xvii. p. 435 (1910), & xix. p. 375, pl. iii. f. 16.

♀. Head, thorax, and abdomen black-brown; frons white; antennæ white at tips; pectus with lateral yellow patches; abdomen with yellow bands on 1st and 5th segments. Fore wing black-brown; a hyaline patch in submedian interspace from near base to towards termen crossed by a slight dark bar at middle, an elliptical patch in end of cell, very elongate spot above vein 6, and spots above veins 4, 3, 2. Hind wing black-brown with a large hyaline patch on inner area confluent with patches above veins 2 and 3; a minute point in cell above origin of vein 2.

Hab. Borneo, Kina Balu, type † ♀ in Coll. Rothschild. *Exp.* 40 millim.

190 *a*. **Amata minuta.** (Plate II. fig. 32.)

Syntomis minuta, Bang-Haas, Iris, xxiv. p. 49 (1910).

♂. Head and thorax black; abdomen black tinged with green, a dorsal orange-yellow patch at base and band on 5th segment. Fore wing black tinged with green; a quadrate hyaline antemedial spot below the cell, oblong spot in end of cell, oblique spot below vein 2, and elongate spots above veins 6, 4, 3. Hind wing black tinged with green; a hyaline patch below the cell confluent with a small spot above base of vein 2, the lower edge of the patch and vein 2 on it yellow.

Hab. W. Turkestan, Kuschk, 1 ♂. *Exp.* 24 millim.

191 *a*. **Amata libanotica.** (Plate III. fig. 1.)

Syntomis libanotica, Bang-Haas, Iris, xix. p. 142 (1906).

Head and thorax blue-black; antennæ whitish at tips; fore and mid femora and tibiæ with yellow streaks; abdomen brilliant metallic blue, the 1st segment with yellow dorsal patch, the 5th segment with yellow band. Fore wing black shot with blue; a small round subbasal spot below the cell, a rather quadrate spot in end of cell and oblique spot below it, a quadrate postmedial spot above vein 6, a rather elongate spot above vein 4 and triangular spot above vein 3. Hind wing blue-black; a white patch below the cell with irregular outer edge indented below veins 3 and 2.

Hab. Syria, Lebanon, 1 ♂, 1 ♀. *Exp.* 38 millim.

193. **Amata phegea**, insert:—

Ab. *krugeri*, Ragusa, Nat. Sicil. xvii. p. 20, pl. 1. f. 2 (1904).

Fore wing with the hyaline spots in submedian interspace confluent; hind wing with the spots large and almost confluent.

Ab. *cyclopea*, Ragusa, Nat. Sicil. xvii. p. 20, pl. 1. f. 3 (1904).

Fore wing without hyaline spots; hind wing with one spot above vein 2.

Ab. *sexmaculata*, Gianelli, Nat. Sicil. xvii. p. 25 (1904).

Fore wing with three hyaline spots; hind wing without spots.

193 *a*. **Amata melanocera.** (Plate III. fig. 2.)

Syntomis melanocera, Hmpsn. A. M. N. H. (7) xi. p. 338 (1903).

Black shot with bright purple; pectus with lateral orange patches; abdomen with dorsal orange patch on 1st segment and dorsal and lateral band on 5th segment. Fore wing with small quadrate subbasal hyaline patch below the cell, a quadrate patch in end of cell and oblique wedge-shaped patch below vein 2 and elongate spots above veins 6, 4, 3. Hind wing with hyaline spot

below the cell and spot above vein 2 and sometimes a small spot above vein 3, the spots varying much in size.

Hab. N. China, Wei-ha-wei (*J. B. Fletcher*), 5 ♂, 1 ♀ type, Leu-kung-tan (*J. B. Fletcher*), 9 ♂. *Exp.* 28–32 millim.

*194 *a*. **Amata albicornis.**

Amata albicornis, Roths. Nov. Zool. xvii. p. 433 (1910), & xix. p. 375, pl. iii. f. 14.

♂. Head and thorax black-brown, the prothorax with small yellow spot; antennæ with the terminal half pure white above; pectus with lateral yellow spots; hind tarsi with the 1st joint white; abdomen black-brown faintly tinged with blue, a narrow orange-yellow dorsal line on 1st segment, orange-yellow lateral spots on 2nd, 3rd, and 4th segments and a yellowish white ventral band on 4th segment. Fore wing black-brown; a small round hyaline spot below the cell near base, oblong patch in end of cell, patch below base of vein 2 rather constricted at submedian fold, small spot above vein 6, and elongate spots above veins 4, 3; a pure white patch on apical part of termen, its inner edge somewhat indented at vein 7. Hind wing black-brown with hyaline patch below the cell extending to just below vein 1, and spot above base of vein 2.

Hab. Tonkin (*Frühstorfer*), type † ♂ in Coll. Rothschild. *Exp.* 52 millim.

195 *a*. **Amata tritonia.** (Plate III. fig. 3.)

Syntomis tritonia, Hmpsn. A. M. N. H. (8) viii. p. 394 (1911).

♀. Head and thorax black shot with metallic green; the antennæ white towards tips; frons and tegulæ with white points at sides, the shoulders with white spots; coxæ with white spots, the femora and tibiæ streaked with white, the tarsi with the basal joint white; abdomen black suffused with metallic green, the basal segment with subdorsal white spots and lateral orange spots, the four following segments with subdorsal orange bands and ventral spots. Fore wing black suffused with brilliant metallic green; an elliptical hyaline antemedial spot below the cell, quadrate spot in end of cell, oblique spot below vein 2 and elongate postmedial spots above veins 6, 4, 3. Hind wing black shot with brilliant metallic green; a hyaline patch on basal inner area, spot in end of cell and postmedial spots above and below vein 3.

Hab. S. Nigeria, Ilesha (*Humfrey*), 1 ♀ type. *Exp.* 50 millim.

195 *b*. **Amata xanthopleura,** n. sp. (Plate III. fig. 4.)

♀. Head and thorax black with a bluish gloss; frons white; antennæ with the terminal half of shaft white above; tegulæ white at sides; patagia with white patches; coxæ with white patches, the femora and tibiæ with white stripes, the tarsi with

the two basal joints banded with white; abdomen black glossed with blue, the basal segment with lateral white spots, the six following segments with lateral orange bands, the ventral surface with orange bands except on terminal segment. Fore wing black glossed with metallic blue; an elongate hyaline antemedial spot below the cell, a quadrate spot in end of cell and spots below veins 7, 5, 4, and 2. Hind wing black glossed with metallic blue; a hyaline spot in end of cell, large spot below the cell, and spots below veins 4 and 3.

Hab. Uganda, E. Busoga (*Neave*), 1 ♀ type. *Exp.* 28 millim.

*196 *a*. **Amata monticola.** (Plate III. fig. 5.)

Syntomis monticola, Auriv. Sjöst. Kilima'njaro-Meru Exp. 9, p. 24, pl. i. f. 9 (1910).

♀. Head, thorax, and abdomen black with a slight greenish gloss; antennæ white at tips; neck with orange ring; pectus with orange patches; abdomen with paired dorsal orange spots on basal segments and lateral series of small spots on 2nd to 6th segments. Fore wing black glossed with green, a quadrate hyaline antemedial spot below the cell, patches in end of cell and below base of vein 2, and spots beyond the cell above veins 6, 4, 3, and a small spot above vein 2. Hind wing black glossed with green; a wedge-shaped hyaline patch below the cell, a large spot above vein 2 and small spot above 3.

Hab. Germ. E. Africa, Kilima'njaro, Kibonoto (*Sjöstedt*), type † ♀ in Mus. Stockholm. *Exp.* 32 millim.

200 *a*. **Amata lagosensis.** (Plate III. fig. 7.)

Syntomis lagosensis, Hmpsn. A. M. N. H. (7) xix. p. 224 (1907).

Black; frons yellowish white; antennæ white at tips; pectus and coxæ with some yellowish white scales; abdomen with dorsal yellowish white patch at base and band on 5th segment, the ventral surface with the segments fringed with yellowish white. Fore wing with wedge-shaped hyaline patch in cell, an elongate patch below the cell from near base to near termen, and elongate spots beyond the cell above veins 6, 4, 3. Hind wing with hyaline patch below the cell and spot above base of vein 2.

Hab. S. Nigeria, Lagos, Ebute Meta (*Boag*), 1 ♂, 2 ♀ type. *Exp.* 26 millim.

206 *a*. **Amata cyanea,** n. sp. (Plate III. fig. 8.)

♀. Head, thorax, and abdomen black glossed with brilliant metallic blue; fore and mid tarsi with the 1st joint white, the hind tarsi with the 1st three joints white. Fore wing black glossed with brilliant metallic blue; a minute round hyaline spot below the cell, a wedge-shaped patch in end of cell, oblique patch below vein 2, a rounded patch below vein 7, and elongate patches

below veins 5 and 4. Hind wing black glossed with brilliant metallic blue; a rounded hyaline subterminal patch below vein 3.

Hab. Uganda, Mbale, Mt. Kokanjero (*Neave*), 1 ♀ type. *Exp.* 46 millim.

207 *a*. **Amata procridia**, Hmpsn., trans. from *Epitoxis* no. 234.

*207 *b*. **Amata jacsoni**.

Amata jacksoni, Roths. Nov. Zool. xvii. p. 432 (1910), & xix. p. 375, pl. iii. f. 27.

♀. Head, thorax, and abdomen black shot with brilliant metallic blue; tarsi with the 1st joint white at base. Fore wing black shot with brilliant metallic blue; a rounded subbasal hyaline spot below the cell, quadrate spot in end of cell, oblique elliptical spot below base of vein 2, round spot above vein 6, and elliptical spots above veins 4, 3. Hind wing black shot with brilliant metallic blue; a small hyaline spot below base of cell and large round spot above vein 2.

Hab. Uganda (*Jackson*), type † ♀ in Coll. Rothschild. *Exp.* 42 millim.

207 *c*. **Amata cenredi**.

Amata kenredi, Roths. Nov. Zool. xvii. p. 436 (1910), & xix. p. 376, pl. iv. f. 1.

♀. Head, thorax, and abdomen black-brown shot with blue; antennæ white at tips; tarsi white at base. Fore wing black-brown suffused with blue; a small round hyaline antemedial spot below the cell, a small oblique spot in end of cell, a bar-shaped spot below vein 2, minute spots above veins 6 and 4 and larger spot above vein 3. Hind wing black-brown suffused with blue; a rounded hyaline spot below middle of cell and small oblique spot above vein 2.

Hab. Up. Congo, Bopoto (*Kenred-Smith*), type † ♀ in Coll. Rothschild; Uganda, Entebbe (*Minchin*), 1 ♀. *Exp.* 42 millim.

207 *d*. **Amata monothyris**, n. sp. (Plate III. fig. 9.)

♀. Head, thorax, and abdomen black suffused with metallic blue-green; antennæ white at tips; tarsi with the 1st joint white. Fore wing black suffused with metallic blue-green; a small hyaline spot in end of cell and another below base of vein 2, a spot above vein 6 and rather large spots above veins 4 and 3. Hind wing black suffused with metallic blue-green; traces of a hyaline spot near base of inner margin; a small spot above base of vein 2.

Hab. Uganda (*Gowdey*, *Neave*), 2 ♀ type, W. shores of Victoria Nyanza, Buddu (*Neave*), 1 ♀, Kampala (*Neave*), 1 ♀, Chagwe, Mabira Forest (*Neave*), 1 ♀. *Exp.* 26–30 millim.

207 *e*. **Amata basithyris**, n. sp. (Plate III. fig. 10.)

♀. Head and thorax black suffused with purple; antennæ white at tips; frons with a few white scales; tarsi with the 1st joint white; abdomen black suffused with metallic blue-green. Fore wing black suffused with purple; a hyaline spot in end of cell and spot below base of vein 2; an elongate spot above vein 6 and small spot above 7; elongate spots above veins 4 and 3. Hind wing black tinged with purple; a hyaline patch from below end of cell to inner margin.

Ab. 1. Frons without white scales; fore wing sometimes without the spot above vein 7.

Ab. 2. Similar, but head, thorax, and wings suffused with green.

Hab. Sierra Leone (*Simpson*), 1 ♀ type; Uganda, Kome I. (*Minchin*), 1 ♀, Chagwe, Mabira Forest (*Neave*), 2 ♀. *Exp.* 24–28 millim.

*207 *f*. **Amata nigrobasalis.**

Amata nigrobasalis, Roths. Nov. Zool. xvii. p. 436 (1910), & xix. p. 375, pl. iii. f. 28.

♂. Head, thorax, and abdomen black-brown shot with blue; antennæ white at tips; frons white; coxæ and fore legs on inner side white, the hind femora with some white at tips, the tarsi white at base. Fore wing black-brown slightly shot with blue towards base; a quadrate hyaline spot in end of cell, rounded spot below vein 2, and elongate spots above veins 7, 6, 4, 3. Hind wing black-brown; an elliptical hyaline patch on inner area.

Hab. Gold Coast, Cape Coast Castle, type † ♂ in Coll. Rothschild. *Exp.* 28 millim.

*207 *g*. **Amata tripunctata.** (Plate III. fig. 11.)

Syntomis tripunctata, Beth.-Baker, A. M. N. H. (8) vii. p. 530 (1911).

♀. Head, thorax, and abdomen black shot with metallic blue; antennæ white at tips. Fore wing black shot with metallic blue; a minute round hyaline spot in upper part of cell towards extremity, and minute postmedial spots above veins 6 and 3 with a point above vein 4. Hind wing black shot with metallic blue; a minute hyaline postmedial spot above vein 2.

Hab. N. Angola, N'Dalla Tando (*Ansorge*), type † ♀ in Coll. Bethune-Baker. *Exp.* 20 millim.

Genus **NEERESSA.**

	Type.
Neeressa, Hmpsn. A. M. N. H. (7) xv. p. 426 (1905)	*sagada*.

Proboscis fully developed; palpi porrect, not reaching beyond the frons; antennæ of female simple; hind tibiæ with the medial spurs absent. Fore wing long and narrow; veins 3, 5 shortly stalked, 4 absent; 6 from well below upper angle; 7, 8, and 11 stalked, 9, 10 absent. Hind wing with vein 3 from angle of cell, 4 absent, 5 from well above angle; 6, 7 coincident.

In key differs from *Eressa* in the fore wing having veins 9, 10 absent.

*207 *h*. Neeressa sagada.

Trichæta sagada, Semp. Reise Phil., Schmett. ii. p. 423 (1898).

♀. Black; frons and back of head white; patagia, pro- and metathorax, pectus and coxæ with patches of white; abdomen with white bands on each segment. Fore wing with white fasciæ below basal half of costa and in submedian fold to near termen; slight

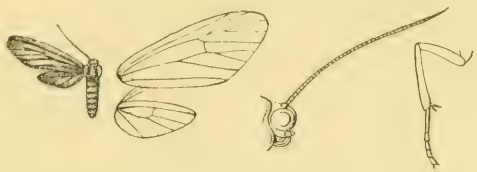

Fig. 6.—*Neeressa sagada*, ♀. ½.

white streaks in end of cell and above veins 2, 3, and 6. Hind wing with white streak below the base of cell and spot above base of vein 2.

Hab. Philippines, N. Luzon, type † ♀ in Coll. Semper. *Exp.* 24 millim.

*207 *i*. Neeressa whiteheadi.

Neeressa whiteheadi, Roths. Nov. Zool. xvii. p. 439 (1910), & xix. p. 376, pl. iv. f. 22.

♂. Head white, the antennæ and palpi brown; tegulæ and patagia white, the former with black bars and dorsal streak, the latter with some brownish hair at tips; dorsum of thorax brown; pectus and coxæ white, the legs brown; abdomen white with narrow segmental brown bands. Fore wing pale reddish brown, thinly scaled, some whitish suffusion below costa to beyond middle. Hind wing pale reddish brown, thinly scaled.

Hab. Philippines, N. Luzon (*Whitehead*), type † ♂ in Coll. Rothschild. *Exp.* 28 millim.

Genus **ERESSA**, insert :—

	Type.
Eressades, Beth.-Baker, A. M. N. H. (8) vii. p. 531 (1911)...	*flavipunctata*.

Sect. (*Eressades*.) Antennæ of male with very long branches; proboscis and palpi absent; hind wing with vein 4 present.

*208 *a*. Eressa flavipunctata.

Eressades flavipunctata, Beth.-Baker, A. M. N. H. (8) vii. p. 531 (1911).

♂. Head, tegulæ, and base of patagia orange-yellow, the rest of thorax brown; antennæ black-brown; legs black-brown; abdomen

orange-yellow with lateral and sublateral brown stripes and ventral series of segmental bands. Fore wing brown ; an elongate yellowish white patch below middle of cell, a wedge-shaped patch in end of cell, a postmedial spot above vein 6 with slight mark above 7, and spots above veins 4, 3. Hind wing brown with yellowish

Fig. 7.—*Eressa flavipunctata*, ♂. ½.

white patch below the cell, wedge-shaped patch in cell, and postmedial patches above veins 4, 3.

Hab. N. Angola, N'Dalla Tando (*Ansorge*), type † ♂ in Coll. Bethune-Baker. *Exp.* 26 millim.

*208 *b*. Eressa dohertyi.

Eressa dohertyi, Roths. Nov. Zool. xvii. p. 437 (1910), & xix. p. 376, pl. iv. f. 5.

♂. Head orange ; antennæ brown, white at tips and with a brown line between their bases ; palpi brown ; thorax dark reddish brown, the tegulæ and patagia with some orange on upper edges and the prothorax with orange patch ; coxæ orange ; abdomen dark reddish brown with dorsal and lateral series of orange spots and ventral bands. Fore wing dark red-brown ; small conjoined antemedial hyaline spots above and below submedian fold and elongate spots in end of cell above and below discal fold ; small hyaline postmedial spots above veins 6, 4, 3. Hind wing dark red-brown with a slight hyaline spot above base of vein 3.

Hab. Lesser Sunda Is., Adonara (*Doherty*), type † ♂ in Coll. Rothschild. *Exp.* 28 millim.

210. Eressa confinis, insert (syns.) :—

Eressa catoria, Swinh. A. M. N. H. (7) vi. p. 305 (1900).

A form transitional to that described as ab. 2 with two small hyaline spots on hind wing.

Syntomoides finitima, Wileman, Entom. xliii. p. 220 (1910).

Formosa, type † ♂ in Coll. Wileman.

Eressa confinis, malaccensis, Roths. Nov. Zool. xvii. p. 437 (1910), & xix. p. 376, pl. iv. f. 6.

A small pale form; wings with the hyaline markings rather small.

Penang (*Curtis*), type † ♂ in Coll. Rothschild; Tonkin.

Eressa confinis, intensa, Roths. Nov. Zool. xvii. p. 438 (1910), & xix. p. 376, pl. iv. f. 7.

A dark form; wings with the hyaline markings rather small.

Madras, Belgaum, type † ♂ in Coll. Rothschild.

*212 *a*. **Eressa catena.** (Plate III. fig. 12.)

Syntomoides catena, Wileman, Entom. xliii. p. 220 (1910).

♀. Head, thorax, and abdomen fuscous brown, the prothorax with pale yellowish patch, the abdomen with dorsal lateral and ventral series of small yellow spots, the anal tuft with some whitish hair. Fore wing fuscous brown; a quadrate hyaline white spot in end of cell, spot above base of vein 2, elongate patch below vein 2, and four postmedial spots between veins 7 and 3. Hind wing fuscous brown with small hyaline white spots above bases of veins 2 and 3.

Hab. Formosa, Garambi (*Wileman*), type † ♀ in Coll. Wileman. *Exp.* 24 millim.

212 *b*. **Eressa strepsimeris.** (Plate III. fig. 13.)

Choromeles strepsimeris, Meyr. P. Linn. Soc. N. S. W. (2) i. p. 786 (1886).

♀. Head and tegulæ orange-yellow, the palpi, antennæ, and a band between their bases brown; thorax brown, the outer edge of patagia and patches on pro- and metathorax orange-yellow; pectus with lateral orange-yellow patches; abdomen brown with six orange-yellow dorsal bands and ventral series of bars, the anal tuft grey-brown. Fore wing brown; a quadrate ochreous hyaline patch in end of cell, elongate patch below middle of cell and basal half of vein 2, patch above base of vein 2, rather elongate spots above veins 6, 4, 3 and smaller spots below 6. Hind wing brown; an ochreous hyaline patch in cell and patches below the cell and above bases of veins 2 and 3.

Hab N. Australia, Pt. Darwin (*J. J. Walker*), 1 ♀. *Exp.* 38 millim. Type † in Mus. Sydney Univ.

212 *c*. **Eressa xanthostacta.** (Plate III. fig. 14.)

Eressa xanthostacta, Hmpsn. A. M. N. H. (7) xi. p. 339 (1903).

♂. Fuscous brown. Head orange except palpi, antennæ and a band between their bases; tegulæ and patches on patagia, pro- and metathorax orange; fore and mid legs fuscous brown, hind legs pale red-brown; abdomen with seven orange bands, the anal tuft

orange with brown dorsal patch. Fore wing with semihyaline orange angled spot below origin of vein 2, a quadrate spot in end of cell and small rounded spots above bases of veins 2, 3, 4, and 6. Hind wing with small orange spots in and below cell and above veins 2 and 3.

♀. Hind legs dark; abdomen with six orange bands, the anal tuft greyish brown.

Hab. Queensland, Townsville (*Dodd*), 3 ♂, 1 ♀ type. *Exp.* ♂ 28, ♀ 32 millim.

212 *d*. **Eressa africana.** (Plate III. fig. 15.)

♂. Head, thorax, and abdomen black-brown; frons yellow; vertex of head with yellow spot; antennæ yellow towards tips; patagia with yellow patches; legs yellow streaked with brown; abdomen with dorsal yellow streak on 2nd to 4th segments, lateral yellow streaks, and the ventral surface ochreous white. Fore wing hyaline, the veins and margins black-brown; a black-brown discoidal patch connected by a streak above vein 5 with the terminal band which expands towards apex and below vein 3. Hind wing hyaline, the veins and margins black-brown; the costal area broadly dark except towards base; the terminal band expanding towards apex.

Hab. Uganda, W. Antiole, 5,000 ft. (*Neave*), 1 ♂ type. *Exp.* 20 millim.

*216 *a*. **Eressa ichneumoniformis.**

Eressa ichneumoniformis, Roths. Nov. Zool. xvii. p. 438 (1910), & xix. p. 376, pl. iv. f. 10.

♂. Head and thorax black, the tegulæ, streaks on outer edge of patagia and each side of dorsum of thorax and spots on metathorax yellow; frons white; antennæ with the shaft white above except towards base; coxæ and lateral patches on pectus white; abdomen black with yellow bands on each segment, the basal band interrupted dorsally. Fore wing hyaline, the veins and margins black; a black discoidal band; the terminal band expanding slightly at apex and between veins 6 and 5. Hind wing hyaline, the veins and margins black; the terminal band expanding somewhat towards apex.

Hab Assam, Khásis, type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

221. **Eressa aperiens**, insert :—

Eressa aperiens, khasiana, Roths. Nov. Zool. xvii. p. 438 (1910), & xix. p. 376, pl. iv. f. 8.

A blacker form; fore wing with the hyaline markings small; hind wing with small hyaline spot below vein 2 and point above it.

Assam, Khásis, type † ♂ in Coll. Rothschild.

*221 *a*. Eressa cuehni.

Hyalæthea kuehni, Roths. Nov. Zool. xvii. p. 439 (1910), & xix. p. 376, pl. iv. f. 23.

♂. Head, thorax, and abdomen dark brown shot with metallic blue; gulæ and neck, except dorsally, orange; legs orange; abdomen with small subdorsal orange spots at base. Fore wing dark brown with a cupreous gloss; the inner area orange to middle; large elliptical hyaline patches below the cell before middle and in end of cell. Hind wing with the basal half and inner area orange, the rest of wing dark brown.

Hab. Moluccas, Larat I. (*Kühn*), type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

222. Eressa annosa del.

Syntomis marcescens and *S. lasara*.

♂. Head, thorax, and abdomen grey-brown, frons white; tegulæ and shoulders with white spots; antennæ blackish, white at tips; abdomen with lateral series of slight whitish spots. Fore wing grey-brown; an elliptical hyaline patch below middle of cell partly bisected by a brown streak in submedian fold; two narrow wedge-shaped hyaline marks in the cell towards extremity; small postmedial hyaline spots above veins 6, 4, 3. Hind wing grey-brown; small hyaline spots in and below the cell, and spots beyond the cell above and below vein 3.

Borneo, Sarawak, Poeh, in Coll. Rothschild.

*222 *a*. Eressa ericssoni. (Plate III. fig. 16.)

Eressa marcescens ericssoni, Roths. Nov. Zool. xix. p. 124 (1912).

Head, thorax, and abdomen grey-brown; antennæ blackish, white at tips; frons white; shoulders with white spots; pectus with whitish patches at sides; coxæ white; abdomen with lateral series of small white spots. Fore wing grey-brown; an elongate hyaline patch below the cell, a wedge-shaped patch in the cell, a spot above base of vein 2, and spots beyond the cell above veins 6, 5, 4, 3. Hind wing grey-brown; a hyaline patch in lower part of cell, a patch below the cell, and spots beyond the cell above and below vein 3.

Hab. Sumatra, Sidempoean (*Ericsson*), type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 36, ♀ 52 millim.

*222 *b*. Eressa marcescens.

Syntomis marcescens, Feld. Reis. Nov. pl. 102. f. 12 (1874).

♂. Head, thorax, and abdomen grey-brown; antennæ blackish, white at tips; frons white; tegulæ white at sides; shoulders with white spots; abdomen with lateral series of small white spots.

Fore wing grey-brown; the cell hyaline; a hyaline patch below the cell from near base to near termen, a patch above base of vein 2, and patches beyond the cell above veins 7, 6, 5, 4, 3. Hind wing hyaline, the veins and margins grey-brown.

♀. Fore wing with the hyaline patches smaller, the patch below the cell not extending to near base, no spot above vein 7; hind wing with no hyaline in the cell, the patch below the cell smaller, small spots above and below veins 3.

Hab. Perak (*Grübauer*), ♂, ♀ in Coll. Rothschild; Java, type † ♂ in Coll. Rothschild. *Exp.* ♂ 36, ♀ 42 millim.

*222 *c*. Eressa lasara.

Syntomis lasara, Pag. Jahrb. Nass. Ver. xxxviii. p. 13, pl. 2. f. 8 (1885).

♂. Head and thorax dark brown; antennæ blackish, white at tips; frons white; shoulders with white patches; coxæ white, the femora streaked with white; abdomen dark brown tinged with blue, lateral series of small white spots. Fore wing dark brown; an elongate hyaline patch below the cell, a wedge-shaped patch in the cell, and spots above bases of veins 7, 6, 5, 4, 3, 2. Hind wing hyaline, the veins and margins rather broadly dark brown.

♀. Fore wing with the hyaline patch in the cell smaller; hind wing dark brown, a small elliptical hyaline spot below the cell, slight streak in lower extremity of cell, and spots above and below vein 3.

Hab. Batoe Is., Poeloe, ♂ in Coll. Rothschild; Nias, type † ♀ in Coll. Rothschild. *Exp.* ♂ 34, ♀ 46 millim.

*222 *d*. Eressa syntomoides. (Plate III. fig. 17.)

Eressa syntomoides, Roths. Nov. Zool. xix. p. 123 (1912).
Eressa syntomoides hosei, Roths. Nov. Zool. xix. p. 124 (1912).

♀. Head and thorax black-brown; frons white; shoulders with white spots; antennæ white at tips; abdomen black-brown, a dorsal white patch on basal segment and slight bands on 4th, 5th, and 6th segments except on ventral surface. Fore wing black-brown; an elongate hyaline patch below middle of cell, wedge-shaped spot in upper part of cell towards extremity, elongate spots above veins 6, 4, 3, a slight streak below vein 6, and small spot above base of vein 2. Hind wing black-brown with a hyaline patch below middle of cell, and spots above veins 3 and 2.

Ab. 1. *hosei*. ♂. Fore wing with the hyaline spots smaller, two small spots in the cell towards extremity, and no streak below vein 6; hind wing with the spots smaller.

♀. Fore wing with one small hyaline spot in upper part of cell towards extremity.

Hab. Borneo, Sarawak, Trusan, type † ♀ in Coll. Rothschild, N. Borneo, Mt. Dulit (*Hose*), type † ♂ ♀ *hosei* in Coll. Rothschild. *Exp.* ♂ 30, ♀ 40 millim.

*224 *a*. Eressa everetti.

Eressa everetti, Roths. Nov. Zool. xvii. p. 439 (1910), & xix. p. 376, pl. iv. f. 21.

♂. Head and thorax pale yellow, the dorsum of thorax and tips of patagia brown; antennæ brown, white at tips; abdomen yellow with narrow brown segmental bands. Fore wing hyaline, the veins and margins brown; a brown discoidal bar, its outer edge angled at vein 6 and connected by narrow fasciæ above vein 5 and below 3 with the brown terminal band which expands towards apex and below vein 3. Hind wing hyaline, the veins and margins narrowly brown.

Hab. N. Borneo, Tutong (*Everett*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

*224 *b*. Eressa vespoides.

Eressa vespoides, Roths. Nov. Zool. xvii. p. 438 (1910), & xix. p. 376, pl. iv. f. 9.

♂. Head and thorax black; frons ochreous white; tegulæ, streaks on outer edge of patagia and on each side of dorsum of thorax, and spots on metathorax orange; antennæ with the shaft white above except towards base; coxæ and lateral patches on pectus whitish; abdomen black with orange bands on each segment. Fore wing hyaline; the veins and margins black; a black discoidal spot connected by a fascia above vein 5 with the terminal band which expands somewhat at apex and vein 2. Hind wing hyaline, the veins and margins black, the terminal band expanding towards apex.

Hab. Assam, Khásis, type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

225 *a*. Eressa pleurosticta.

Eressa pleurosticta, Hmpsn. P. Z. S. 1910, p. 390, pl. xxxvi. f. 4.

♀. Head, thorax, and abdomen dark brown; antennæ white at tips; shoulders with yellow patches; fore legs with the extremities of tibiæ and the tarsi yellowish; abdomen with dorsal yellow band at base and ill-defined yellow lateral and sublateral spots on medial segments. Fore wing black-brown with quadrate hyaline patch in middle of cell, elongate oblique patch below vein 2, small patch above its base, and postmedial patches above veins 6, 5, 4, 3. Hind wing black-brown with hyaline subterminal spots above and below vein 2 and smaller spot above vein 3.

Hab. Congo, Lualaba R. (*Neave*), 1 ♀ type. *Exp.* 30 millim.

Genus **PARALÆTHIA**.

Type.

Paralæthia, Hmpsn. A. M. N. H. (7) xix. p. 224 (1907) ..... *subformicina*.

Proboscis fully developed; palpi porrect, not extending beyond the frons; antennæ of male ciliated; fore tibiæ and tarsi of male thickly fringed with

scales on inner side; mid and hind tibiæ with the spurs short. Fore wing with veins 2, 3 from a point long before angle of cell; 4, 5 from angle; 6 from long below upper angle; 7, 8, 9, 10, 11 stalked. Hind wing with vein 2 from long before angle of cell; 3, 4 absent; 5 from angle; 6, 7 stalked, 6 curved downwards.

In key differs from *Desmidocnemis* in the palpi being porrect; fore wing with veins 2, 3 from a point and 11 stalked with 7, 8, 9, 10.

*230 *a*. **Paralæthia subformicina.**

Ceryx subformicina, Beth.-Baker, Nov. Zool. xi. p. 382 (1904).

♂. Head and thorax black-brown; frons yellowish white; tegulæ, patagia, and metathorax with yellowish white patches; fore legs yellowish on inner side; abdomen black-brown; subbasal yellowish white spots at base, the other segments with yellowish white bands except on ventral surface. Fore wing black-brown; a wedge-shaped yellowish hyaline patch filling the cell and another the

Fig. 8.—*Paralæthia subformicina*, ♂. ½.

submedian interspace and extending to below vein 1 beyond middle, some pale yellow above base of vein 1; elongate yellowish hyaline patches above veins 7, 6, 4, 3. Hind wing with the cell pale yellow; yellowish hyaline patches in submedian interspace and above vein 2; the underside with the cell and costal area to beyond middle pale yellow.

Hab. Br. N. Guinea, Up. Aroa R. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

Genus **HYALÆTHEA**, insert:—

	Type.
Paraceryx, Baker, Nov. Zool. xi. p. 383 (1904)	*aroa*.

Sect. I. (*Paraceryx*.) Fore tibiæ and tarsi of male fringed with long hair and scales on both sides.

230 *b*. **Hyalæthea aroa.**

Paraceryx aroa, Beth.-Baker, Nov. Zool. xi. p. 383 (1904).

♂. Head and thorax black; shoulders with yellow patches; fore legs with the fringes of hair brownish; abdomen blue-black with small orange lateral spots on first two segments and some

scales on 3rd. Fore wing greenish black; a wedge-shaped hyaline patch in cell; an elongate patch below the cell and vein 2 extending

Fig. 9.—*Hyalæthea aroa*, ♂. ½.

nearly to termen and dilated at middle; elongate spots above veins 3, 4 and 6 and a small spot above 7. Hind wing greenish black, the cilia near termen brownish.

Hab. Br. N. Guinea, Aroa R. (*Meek*), 1 ♂. *Exp.* 32 millim. Type † in Coll. Rothschild.

*230 *c*. Hyalæthea meeci.

Ceryx meeki, Roths. Nov. Zool. xvii. p. 429 (1910), & xix. p. 375, pl. iii. f. 25.

♂. Head and thorax black, the frons, tegulæ except at middle of tips, patagia at base, and metathorax yellow; fore coxæ yellow; abdomen black with a yellow band on each segment. Fore wing black; a wedge-shaped hyaline patch in cell, elongate patch below the cell, elongate spot above veins 6, 4, 3 and small spot above vein 7. Hind wing yellow; the terminal area black except towards tornus, expanding at apex and emitting streaks inwards below vein 2 and at vein 1; the underside with the costal area black.

Hab. Br. N. Guinea, Milne Bay (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

*230 *d*. Hyalæthea alberti.

Hyalæthea alberti, Roths. Nov. Zool. xvii. p. 440 (1910), & xix. p. 376, pl. iv. f. 28.

♂. Head, thorax, and abdomen black-brown shot with blue; frons and triangular patches on patagia orange-yellow; coxæ, femora, and legs below yellow, the fringe of scales of fore tarsi whitish; abdomen with orange bands on each segment. Fore wing black-brown with a cupreous gloss; a wedge-shaped hyaline patch in cell, elongate patch in submedian interspace from near base to near termen, and elongate spots above veins 6, 4, 3. Hind wing black-brown with a cupreous gloss; the lobe of inner margin and cilia towards tornus whitish; the cell and a patch below it orange-yellow; hyaline spots above veins 2 and 3.

Hab. Solomons, Vella Lavella (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 34 millim.

*230 *e*. Hyalæthea solomonis, n. n.

Hyalæthea meeki, Roths. Nov. Zool. xvii. p. 439 (1900), nec p. 429, & xix. p. 376, pl. iv. f. 24.

♀. Head and thorax orange, the dorsum of thorax with some black-brown; antennæ black; legs banded with blackish; abdomen black-brown with orange bands on each segment. Fore wing hyaline, the veins and margins black-brown; the base of inner margin with some orange; black-brown fasciæ from the cell to termen between veins 6 and 5 and 3 and 2; the terminal band expanding somewhat at apex. Hind wing hyaline; the cell, basal half of costal area, and inner area to near termen orange; the terminal half of costal area, vein 2, and the termen black-brown.

Hab. Solomons, Guadalcanar (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 32 millim.

*230 *f*. Hyalæthea georgiensis.

Hyalæthea metaphæa, georgiensis, Roths. Nov. Zool. xvii. p. 440 (1910), & xix. p. 376, pl. iv. ff. 26, 27.
Hyalæthea decipiens, Roths. Nov. Zool. xvii. p. 440 (1910).

♂. Head, thorax, and abdomen black-brown shot with blue; palpi at tips and frons white; shoulders with orange patches; pectus, coxæ, femora, and the fringes of scales on fore legs creamy white; abdomen with small subdorsal yellow spots on basal segment and lateral and ventral bands on each segment. Fore wing black-brown with a faint bluish gloss; a wedge-shaped hyaline patch in cell, elongate triangular patch in submedian interspace, and elongate spots above veins 6, 4, 3. Hind wing black-brown with a bluish gloss; the lobe on inner margin white; hyaline spots below the cell and above vein 2.

Hab. Solomons, New Georgia (*Meek*), type † ♂ and type *decipiens* in Coll. Rothschild. *Exp.* 30 millim.

231 *a*. Hyalæthea basigera, Wlk., trans. from *Syntomis*, no. 151, and insert:—

Amata basigera, gilolensis, Roths. Nov. Zool. xvii. p. 434 (1910), & xix. p. 375, pl. iii. f. 19.

Male with the two hyaline spots on hind wing almost absent, female with them entirely absent.

Moluccas, Gilolo (*Doherty*, *Waterstradt*), type † ♀ in Coll. Rothschild.

*231 *b*. Hyalæthea simillima.

Amata simillima, Roths. Nov. Zool. xvii. p. 434 (1910), & xix. p. 375, pl. iii. f. 20.

♀. Head and thorax black-brown; frons pale yellow; tegulæ and upper edge of patagia orange; pectus and legs suffused with

orange; abdomen black-brown with orange bands on each segment and the anal tuft orange. Fore wing black-brown; some orange suffusion at base of inner area; an elongate wedge-shaped hyaline patch in cell, a patch in submedian interspace from near base to near termen, and very elongate spots above veins 6, 4, 3. Hind wing black-brown; some orange suffusion at base and rather elongate spots above veins 2 and 3.

Hab. N. Guinea, Obi, Pulo Bisa (*Doherty*), type † ♀ in Coll. Rothschild, *Exp.* 30 millim.

232 *a*. **Hyalæthea bivitreata.** (Plate III. fig. 18.)

Hyalæthea bivitreata, Hmpsn. A. M. N. H. (8) iv. p. 344 (1909).

♂. Head, thorax, and abdomen brown; palpi except at tips, frons, shoulders, pectus, legs, and ventral surface of abdomen orange. Fore wing brown with a purplish tinge; a wedge-shape hyaline patch in cell and elongate triangular patch below the cell from near base to near tornus. Hind wing brown, the base yellow, the lobe on inner margin yellow.

Hab. Tenimber, Larat, 2 ♂ type. *Exp.* 22 millim.

*232 *b*. **Hyalæthea distorta.**

Callitomis distorta, Roths. Nov. Zool. xvii. p. 429 (1910), & xix. p. 375, pl. iii. f. 33.

♂. Head and thorax dark red-brown mixed with some orange-yellow; frons orange; abdomen dark brown with yellow segmental bands, the basal segment yellow. Fore wing dark red-brown with yellow point at base of median nervure and some yellowish in base of submedian fold. Hind wing dark red-brown with some yellowish in and below base of cell.

Hab. New Guinea, Pulo Bisa, N. of Obi (*Doherty*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

233 *a*. **Epitoxis nigra.** (Plate III. fig. 19.)

Epitoxis nigra, Hmpsn. A. M. N. H. (7) xi. p. 339 (1903).

♂. Black; head and thorax with a little yellowish hair; abdomen with lateral yellow line not reaching extremity. Fore wing with quadrate hyaline patch below base of cell; an elongate patch in end of cell; an oblique patch below vein 2; an elongate spot above vein 6 and spots above veins 3 and 4. Hind wing with patch below base of cell and rather small spot above vein 2; cilia of inner margin whitish.

Hab. Gazaland, Mt. Chirinda (*Marshall, Odendaal*), 3 ♂ type; Natal, Durban (*Trimen, Jeffery*), 2 ♂. *Exp.* 32 millim.

234 *a*. **Epitoxis albicincta.** (Plate III. fig. 20.)

Epitoxis albicincta, Hmpsn. A. M. N. H. (7) xi. p. 339 (1903).

♂. Black slightly shot with blue; head, thorax, and legs with some white hair; abdomen with narrow segmental white bands. Fore wing with slight white streaks below costa and costal nervure; a quadrate hyaline patch below base of cell; an elongate patch in end of cell; an oblique patch below vein 2; an elongate spot above vein 6 and spots above veins 3, 4. Hind wing with basal hyaline patch from cell to inner margin; a postmedial spot between veins 2 and 3; cilia white at tips.

Hab. Br. E. Africa, Fort Ternan (*Betton*), 1 ♂ type, Nandi plateau (*Neave*), 1 ♂, N. Kavirondo, Mumias (*Neave*), 1 ♂, 1 ♀, Mt. Elgon (*Neave*), 1 ♂, 1 ♀, S. Kavirondo, Kuja Valley (*Neave*), 4 ♂, 1 ♀, Migori Valley (*Neave*), 2 ♀; Uganda, Entebbe (*Minchin*), 1 ♂, Unyoro, Kafu R. (*Neave*), 2 ♂, 1 ♀, Busoga (*Neave*), 1 ♂, Ruwenzori (*Wollaston*), 1 ♂, 1 ♀. *Exp.* 28 millim.

234 *b*. **Epitoxis borguensis.** (Plate III. fig. 21.)

Syntomis borguensis, Hmpsn. A. M. N. H. (7) viii. p. 166 (1901).

Black; head, thorax, and abdomen shot with green; pectus with lateral orange patches; abdomen with dorsal orange patch at base and bands on 3rd, 4th, and 5th segments, the ventral surface with segmental lines on 1st four segments; wings shot with purple. Fore wing with the costal area suffused with green; a hyaline white spot in end of cell, an elliptical spot below base of vein 2 and elongate spots above veins 3, 4, and 6. Hind wing with hyaline white spot at base of inner area and a round spot above vein 2.

Hab. S. Nigeria, Bende (*Simpson*), 1 ♂; N. Nigeria, Baro (*Morrison*), 1 ♀, Borgu, Yelwa Lake (*Migeod*), 2 ♂ type. *Exp.* 28–32 millim.

234 *c*. **Epitoxis ansorgei.**

Epitoxis ansorgei, Roths. Nov. Zool. xvii. p. 441 (1910), & xix. p. 376, pl. iv. f. 16.

♀. Head, thorax, and abdomen black-brown glossed with metallic blue; pectus with lateral yellow patches; abdomen with orange-yellow bands at base and on 3rd, 4th, and 5th segments, except on ventral surface. Fore wing black-brown glossed with metallic blue; a rounded hyaline spot in end of cell, oblique spot below base of vein 2, and elongate spots above veins 6, 4, 3. Hind wing black-brown slightly glossed with blue; a hyaline patch below the cell, large spot above vein 2, and minute spot above vein 3.

Hab. Uganda, Ungora, Mruli (*Ansorge*), type † ♂ in Coll. Rothschild, Kafu R. (*Neave*), 1 ♀. *Exp.* 34 millim.

*238 *a*. Stictonaclia maria.

Naclia maria, Oberth. Ét. Lép. Comp. iii. p. 94, pl. 10. ff. 6, 7 (1909).

♂. Head and thorax black; antennæ yellow, black at base and extremity; tegulæ yellow, the patagia with yellow streaks, the metathorax with yellow patch; abdomen yellow with black bands on each segment, the anal tuft yellow with a dorsal spot and the sides black; pectus, legs, and ventral surface of abdomen yellow. Fore wing black; a yellow antemedial patch below the cell; a hyaline patch in end of cell and patches above and below base of vein 2 with the veins between them yellow; postmedial hyaline spots above and below vein 4, the veins and outer edge of lower spot yellow; a small hyaline spot above vein 6. Hind wing yellow; a black discoidal spot; the termen black expanding somewhat towards apex. Underside of fore wing with yellow streak below basal half of costa.

♀. Fore wing with yellow antemedial streak below the costa and the patch below the cell larger, the medial hyaline patches with yellow streak below costa and the patch below vein 2 edged with yellow, the spot above vein 6 yellow; the underside with the basal area yellow with small black spot at base and small spots in and below the cell before the hyaline patches.

Ab. 1. ♀. Abdomen entirely yellow; wings with the basal areas yellow and the black areas suffused with yellow.

Hab. Madagascar, Sainte-Marie (*Perrot*). *Exp.* 30 millim. This species is unknown to me.

*238 *b*. Stictonaclia marietta.

Naclia marietta, Oberth. Ét. Lép. Comp. iii. p. 95, pl. 10. f. 8 (1909).

♂. Head and thorax black, the tegulæ yellow; abdomen black with the 1st segment yellow; pectus, legs, and ventral surface of abdomen yellow. Fore wing black; a yellow antemedial patch below the cell; a hyaline spot in end of cell and yellow spot above base of vein 2; a yellow postmedial bar between veins 7 and 4. Hind wing yellow with terminal black band. Underside of fore wing with short yellow basal and antemedial streaks below costa; hind wing with the terminal band narrowing to tornus.

Hab. Madagascar, Sainte-Marie (*Perrot*). *Exp.* 24 millim. This species is unknown to me.

239. **Pseudonaclia puella**, insert :—

Pseudonaclia puella, minor, Roths. Nov. Zool. xvii. p. 441 (1910), & xix. p. 376. pl. iv. f. 17.

Fore wing with the hyaline spots smaller, the spot below end of cell round, the spot beyond lower angle of cell not extending above vein 5.

Br. E. Africa, Escarpment (*Doherty*), type † ♂ in Coll. Rothschild.

*241 *a*. Micronaclia oberthueri.

Micronaclia oberthueri, Roths. Nov. Zool. xviii. p. 155 (1911), & xix. p. 377, pl. v. f. 26.

♀. Head, thorax, and abdomen black-brown. Fore wing black-brown; a round hyaline spot in cell towards extremity, a small postmedial spot below costa, and spots above and below vein 4. Hind wing black-brown with a semihyaline white patch on inner area.

Hab. Madagascar, Tananarive (*Chulliat*), type † ♀ in Coll. Rothschild. *Exp.* 18 millim.

*242 *a*. Micronaclia bicolor.

Micronaclia bicolor, Roths. Nov. Zool. xviii. p. 155 (1911), & xix. p. 377, pl. v. f. 13.

Hind wing with veins 3, 5 from cell.

♀. Head, thorax, and abdomen black-brown. Fore wing uniform

Fig. 10.—*Micronaclia bicolor*, ♀. ½.

dark brown. Hind wing crimson, the costal area and margins black-brown, the terminal band widening towards apex.

Hab. Madagascar, Tananarive (*Chulliat*), type † ♀ in Coll. Rothschild. *Exp.* 18 millim.

*242 *b*. Micronaclia leopardina.

Micronaclia leopardina, Roths. Nov. Zool. xviii. p. 155 (1911), & xix. p. 377, pl. v. f. 15.

Fore wing with vein 11 from the cell; hind wing with veins 3 and 5 from cell.

Fig. 11.—*Micronaclia leopardina*, ♀. ½.

♀. Head and thorax black-brown; frons, gulæ, a patch on vertex of head, patches on shoulders and metathorax and a streak on prothorax white; pectus and legs whitish; abdomen black-

brown with white bands on each segment. Fore wing black-brown; a creamy white antemedial patch from below costa to submedian fold, then angled inwards to vein 1; a spot from below middle of costa to median nervure and one from below median nervure to inner margin; a postmedial spot from below costa to vein 6, and oblique spot from vein 5 to vein 3 just before termen. Hind wing black-brown; a creamy white band from below end of cell to inner margin before tornus, running inwards on inner margin to before middle; a band from costa beyond middle to vein 3 on which it is angled outwards to near termen.

Hab. Madagascar, Tananarive (*Chulliat*), type † ♀ in Coll. Rothschild. *Exp.* 18 millim.

*249 *a*. Thyrosticta luctuosa.

Naclia luctuosa, Oberth. Ann. Soc. Ent. Fr. lxxix. p. 467, pl. 16. f. 4 (1911).

♀. Head, thorax, and abdomen black-brown; shoulders with orange-red patches; abdomen with lateral orange patches near extremity. Fore wing black-brown with small hyaline spot in end of cell and point below it above vein 2, a small postmedial spot above vein 6 and spots above and below vein 4. Hind wing black-brown with triangular hyaline antemedial spot below the cell and point below vein 1, and two postmedial spots beyond lower angle of cell. Underside of fore wing with brown patch on inner area from below end of cell to near tornus.

Hab. Madagascar, Fénérive (*Perrot*). *Exp.* 34 millim. This species is unknown to me.

*249 *b*. Thyrosticta mœrens.

Naclia mœrens, Oberth. Ann. Soc. Ent. Fr. lxxix. p. 467, pl. 16. f. 3 (1911).

♀. Head, thorax, and abdomen black-brown; antennæ white at tips; shoulders with white patches; abdomen with lateral white patches at base and three on ventral surface. Fore wing black-brown; a small antemedial hyaline spot above vein 1, a spot in end of cell and small spot below it above vein 1, small postmedial spots above veins 6 and 4 and larger spot below vein 4. Hind wing black-brown with small hyaline spot in base of cell, a patch below the cell, and spot beyond lower angle of cell.

Hab. N. Madagascar, Antakares (*Perrot*). *Exp.* 32 millim. This species is unknown to me.

250. **Dysauxes punctata**, insert:—

Ab. *ragusaria*, Zuckert, Nat. Sicil. xvii. p. 97 (1904).

Fore wing without white spots; hind wing with the hyaline area extending to costa.

Subsp. *separata*, Bang-Haas, Iris, xix. p. 143, pl. 5. f. 15 (1906).

Hind wing with the orange reduced to the basal area and a small spot on inner margin.

Algeria, S. Oran.

Subsp. *kashmirensis*, Roths. Nov. Zool. xvii. p. 441 (1910), & xix. p. 376, pl. iv. f. 11.

Similar to *hyalina*, but fore wing rather broader; hind wing with the terminal band much broader.

Kashmir, Goorais Valley (*Leech*), type † ♂ in Coll. Rothschild.

*251 *a*. Dysauxes florida.

Dysauxes florida, de Joan. Ann. Soc. Ent. Fr. 1906, p. 169, pl. 9. f. 1.

♀. Head and thorax chocolate-brown; neck with yellow ring; coxæ yellow; tarsi slightly ringed with yellowish; abdomen brown with broad lateral and ventral orange fasciæ. Fore wing chocolate-brown; an antemedial hyaline point in cell; a hyaline bar across end of cell with spots below it above and below vein 2; an oblique postmedial series of five hyaline spots between veins 9 and 3. Hind wing orange; the costal area brown to end of cell; a terminal brown band with dentate inner edge angled inwards at vein 3.

Hab. Mauritius, Kanaka, type † ♀ in Coll. de Joannis. *Exp.* 26 millim.

253. **Dysauxes lucia**, insert (syn.):—

Dysauxes subfenestrata, Auriv. Ent. Tidsk. 1899, p. 245, type † ♀ in Mus. Stockholm.

255 *a*. Tritonaclia erubescens.

Tritonaclia erubescens, Hmpsn. A. M. N. H. (7) viii. p. 169 (1901).

Antennæ of male with long branches.

♂. Head and thorax brown; 3rd joint of palpi, basal joint of antennæ, streaks on femora and tibiæ, and the tarsi crimson (abdomen

Fig. 12.—*Tritonaclia erubescens*, ♂. ½.

wanting). Fore wing brown with a slight crimson tinge; the costa pale rufous from middle to near apex; a round hyaline spot in end of cell; a small spot below base of vein 2 followed by a larger round

spot; a postmedial series of four spots between veins 7 and 3 with the two lower displaced towards termen. Hind wing pale dull crimson; a hyaline spot above base of vein 3 with a small spot above vein 4 and brownish suffusion beyond them.

Hab. Br. E. Africa, Uganda Ry., Mile 478 (*Betton*), 1 ♂ type. *Exp.* 36 millim.

257. **Meganaclia carnea**, insert :—

276. *Metarctia perpusilla*, which is the ♂ of the species and has priority.

258 *a*. **Meganaclia minor**, n. sp. (Plate III. fig. 22.)

♂. Head pale yellow; antennæ with shaft white above; palpi brownish at base, blackish at tips; thorax pale grey-brown; legs yellowish white, the fore legs tinged with brown; abdomen pale grey-brown with dorsal, lateral, and sublateral series of small black spots, the ventral surface whitish. Fore wing pale semihyaline brownish; a whitish triangular spot in middle of cell; a whitish band from below costa beyond middle, with irregular edges to vein 4, then very narrow and obliquely curved to submedian fold, where it is angled inwards, then excurved; the veins whitish towards termen. Hind wing pale semihyaline brownish; a curved whitish postmedial band, the veins whitish towards termen.

Hab. Uganda, Entebbe (*Neave*), 1 ♂ type. *Exp.* 42 millim.

262. **Thyretes negus**, insert (syn.) :—

Thyretes misa, Strand, Ann. Soc. Ent. Belg. lv. p. 146 (1911).

Togoland.

*263 *a*. **Thyretes trichætiformis**. (Plate III. fig. 23.)

Thyretes trichætiformis, Zerny, Iris, xxvi. p. 119 (1912).

♂. Head and shoulders yellow, the antennæ dark brown with the shaft white above at tips; thorax reddish brown with yellow patch on metathorax, coxæ and tarsi except at extremities yellow; abdomen brown with yellow bands on each segment. Fore wing reddish brown; a yellow patch below base of cell; a large quadrate antemedial hyaline patch below the cell with yellow streak below it; a wedge-shaped hyaline patch in middle of cell; a curved series of hyaline spots from vein 7 to vein 2 below middle of cell separated by slight yellow streaks on the veins and with the spot below vein 6 small. Hind wing reddish brown; the base of inner area yellow; a series of four hyaline spots below the cell from vein 5 to before 2, with some yellow on the veins between them.

Hab. German E. Africa, Zanzibar Coast, Sikora, type † ♂ in Mus. Vienna. *Exp.* 26 millim.

*265 *a*. Apisa vitrina.

Pseudapiconoma vitrina, Oberth, Ét. Lép. Comp. iii. p. 95, pl. xi. f. 5 (1909).

Hind wing of male aborted and minute.

♂. Head and thorax white mixed with brown; palpi blackish except at tips; antennæ brown; abdomen white with diffused dorsal blackish bands. Fore wing white with reddish brown suffusion on costal area, in cell, and discal fold to beyond middle and on basal inner area, the veins on this brown area streaked

Fig. 13.—*Apisa vitrina*, ♂. ½.

with black; some blackish on inner margin near base; a faint diffused obliquely curved brownish subterminal band, diffused to termen between veins 4, 3. Hind wing white with diffused blackish patch at middle of inner area.

Hab. Fr. Congo, Abanga R., in Coll. Rothschild. *Exp.* 32 millim.

*266 *a*. Apisa sjostedti. (Plate III. fig. 24.)

Apisa sjostedti, Auriv. Ark. f. Zool. ii. 4. p. 28 (1904).

♀. Head, thorax, and abdomen dark brown; palpi and legs yellow; antennæ with shaft yellow above; vertex of head, pro- and metathorax with orange patches, shoulders with slight orange spots; abdomen with dorsal and subdorsal orange spots on 2nd and 3rd segments followed by bands on the next three segments and a large patch on two terminal segments, the ventral surface white slightly tinged with yellow. Fore wing dark brown; a small hyaline spot below the base of vein 2 with yellow bar from it to below vein 1; a small round hyaline spot in end of cell; a postmedial yellowish hyaline spot above vein 6 and conjoined hyaline spots between veins 5 and 3. Hind wing dark brown with a minute whitish spot beyond lower angle of cell.

Hab. Cameroons, type † ♀ in Mus. Stockholm. *Exp.* 30 millim.

267. **Apisa? abdominalis** belongs to the family **Zygænidæ**.

*268 *a*. Apisa lamborni. (Plate III. fig. 25.)

Apisa lamborni, Roths. Nov. Zool. xx. p. 188 (1913).

♂. Head, thorax, and abdomen dark reddish brown, the shaft of antennæ with some yellowish above; tarsi yellow; abdomen

with lateral series of slight yellowish spots and a dorsal spot on anal segment, the anal tuft with some yellow, the ventral surface banded with yellow. Fore wing dark reddish brown; a small yellowish white medial spot above vein 1 and small spot in cell towards extremity; a small round postmedial spot above vein 6 and rather more elongate spots above veins 4 and 3. Hind wing dark reddish brown with a small whitish spot above base of vein 3.

Hab. S. Nigeria, Lagos (*Lamborn*), type † ♂ in Mus. Oxon. *Exp.* 24 millim.

271 *a*. **Apisa metarctiodes.** (Plate III. fig. 26.)

Apisa metarctiodes, Hmpsn. A. M. N. H. (7) xix. p. 224 (1907).

♂. Head and thorax reddish fulvous; palpi, frons, branches of antennæ, and tips of tegulæ brown; pectus and fringes of hair on femora and tibiæ brown; abdomen fulvous, tinged with brown towards extremity, a slight whitish dorsal band at base and subdorsal white spots on 2nd segment, the ventral surface brown with the 1st three segments fringed with whitish. Fore wing reddish fulvous, the medial area suffused with dark brown except at costa, narrowing below the cell and embracing all the spots, the veins of terminal area with dark streaks; a quadrate semi-hyaline white spot in middle of cell and an irregularly elliptical spot below middle of cell extending to below vein 1; a trifid spot beyond upper angle of cell from above vein 7 to below 6 and a bifid spot above and below vein 4; cilia dark brown. Hind wing whitish, the inner area tinged with flesh-yellow and the inner margin and terminal area suffused with brown; a small brown spot below end of cell above base of vein 2; cilia yellowish; the underside flesh-yellow, the disk whitish, a curved brown discoidal band.

Hab. Uganda, Ruwenzori, 6000 ft. (*Wollaston*), 1 ♂ type. *Exp.* 34 millim.

271 *b*. **Apisa parachoria**, Holland, trans. from *Metarctia* no. 282.

271 *c*. **Apisa albimacula**, n. sp. (Plate III. fig. 27.)

♀. Head, thorax, and abdomen rufous; frons and antennæ whitish; tarsi yellowish tinged with rufous; abdomen with slight whitish dorsal bands on basal half; subbasal white spots on 2nd segment and lateral spots on 3rd, 4th, and 5th segments. Fore wing rufous; a yellowish subbasal patch below the cell; a round white spot in the cell towards its extremity and medial spot in submedian interspace; a postmedial spot above vein 6 with small reddish spot above base of vein 7 and a white spot above and below vein 4 which is tinged with reddish. Hind wing rufous; the cell and costal area to beyond middle whitish; an elliptical white postmedial spot from vein 4 to below 3.

Ab. 1. Fore wing with the subbasal spot obsolescent, the other spots smaller and no reddish spot above vein 7.

Hab. Uganda, Mabira Forest, Chagwe (*Neave*), 1 ♀ type, Mbale (*Neave*), 1 ♀. *Exp.* 34–38 millim.

271 *d.* **Apisa endoxantha**, n. sp. (Plate III. fig. 28.)

♀. Head, thorax, and abdomen rufous; frons and shaft of antennæ above yellowish; tarsi reddish yellow. Fore wing rufous; a yellowish subbasal spot above vein 1; a rounded white spot edged with yellowish in the cell towards its extremity and a similar medial spot in submedian interspace extending to below vein 1, its lower part reddish yellow; a small postmedial spot edged with yellowish above vein 6 and a spot on vein 4 which is yellowish where it bisects it. Hind wing rufous; the inner area reddish yellow to near tornus; a white spot between veins 4, 3, conjoined to a slight yellowish spot below vein 3.

Hab. Uganda, Kampala (*Neave*), 1 ♀ type. *Exp.* 34 millim.

272. **Apisa monotica**, insert:—

Apisa quadrimaculata, Zerny, Iris, 1912, p. 120.

A form with the spot below the cell of fore wing rounded and separated from the patch in the cell.

Congo, Stanleyville Distr., Mawambi (*Grauer*), type † ♂ in Mus. Vienna.

273. **Apisa canescens**, insert:—

Apisa subcanescens, Roths. Nov. Zool. xvii. p. 442 (1910), & xix. p. 376, pl. iv. ff. 12, 18.

The small form with the female white like the male.

Senegambia, Casamance (*Laglaize*), type † ♂ in Coll. Rothschild.

*273 *a*. **Apisa rendalli.**

Apisa rendalli, Roths. Nov. Zool. xvii. p. 441 (1910), & xix. p. 376, pl. iv. f. 14.

♂. Head, thorax, and abdomen pale grey-brown with a fuscous tinge; antennæ whitish except towards base; palpi and frons rather darker; wings uniform pale grey-brown with a fuscous tinge.

Hab. Br. Centr. Africa, Shiré R., Zomba (*Rendall*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

*274 *a*. **Apisa aurantiaca.**

Apisa aurantiaca, Roths. Nov. Zool. xvii. p. 441 (1910), & xix. p. 376, pl. iv. f. 19.

Metarctia palæmon, Druce, A. M. N. H. (8) viii. p. 138 (1911).

♂. Head, thorax, and abdomen orange-yellow, the last greyish at extremity; antennæ black-brown, white at tips. Fore wing

orange-yellow, the costa, median nervure, and terminal area pale grey-brown. Hind wing orange-yellow; a grey-brown patch on termen from apex to vein 3.

Hab. Cameroons, Ja R., Bitji (*Bates*), type † ♂ *palæmon* in Coll. Joicey; Congo, Kassai Distr., type in Coll. Rothschild. *Exp.* 30 millim.

Genus **METARCTIA** del. *Balacra*, Wlk.

278. **Metarctia lateritia.**

Ab. 3. Thorax and fore wing uniformly tinged with brown more or less strongly.

Abyssinia (*Degen*), 5 ♂.

*278*a*. **Metarctia cameruna**, n. n.

Metarctia hæmatoessa, Oberth. Ann. Soc. Ent. Fr. lxxix. p. 469, pl. 17. f. 7 (1911), nec Holland.

♂. Head, thorax, and abdomen ochreous; antennæ blackish, brown at base and white at extremity. Fore wing pale red-brown; a scarlet streak below basal half of costa; the cell and area just below it suffused with scarlet; a scarlet spot below middle of cell, a spot in end of cell, and rather curved bar beyond the cell. Hind wing scarlet with the cilia yellow. Underside of fore wing with the inner area scarlet to beyond middle.

Hab. Cameroons (*Conradt*). *Exp.* 48 millim.

279. **Metarctia invaria**, insert (syns.):—

Metarctia rosacea, Beth.-Baker, A. M. N. H. (8) vii. p. 532 (1911).

Angola, N'Dalla Tando (*Ansorge*), type † ♂ *rosacea* in Coll. Bethune-Baker.

Metarctia erubescens, conradti, Oberth. Ann. Soc. Ent. Fr. lxxix. p. 468, pl. 17. f. 9 (1911).

The typical brownish form.

Cameroons, Johann Albrechts Höhe (*Conradt*).

Metarctia postrosea, Roths. Nov. Zool. xx. p. 187 (1913).

A form with the markings of fore wing ochreous yellow; hind wing strongly suffused with rose-pink.

S. Nigeria, Lagos (*Lamborn*), type † ♀ in Mus. Oxon.

*279*a*. **Metarctia aurantiifusca.** (Plate III. fig. 29.)

Metarctia aurantiifusca, Roths. Nov. Zool. xx. p. 187 (1913).

♀. Head and thorax fulvous orange, antennæ with the branches blackish; abdomen orange, the dorsum with a faint scarlet tinge.

Fore wing fuscous brown, the basal half suffused with fulvous orange and with fulvous orange patch at base of inner area and the costal area orange to towards apex; a rounded orange-yellow spot below base of vein 2, a rather lunulate spot in end of cell, postmedial spots beyond the cell and above base of vein 2, and elongate spots in the interspaces of terminal area from costa to vein 2, the spots above veins 3 and 2 extending to near the cell. Hind wing orange-yellow, the veins of terminal half dark brown, the termen with some brown suffusion and the cilia brown.

Hab. S. Nigeria, Lagos (*Lamborn*), type † ♀ in Mus. Oxon. *Exp.* 38 millim.

*279 *b*. **Metarctia rubrilineata.** (Plate III. fig. 30.)

Metarctia rubrilineata, Beth.-Baker, A. M. N. H. (8) vii. p. 533 (1911).

♂. Head, thorax, and abdomen red-brown; palpi, sides of frons, and basal joint of antennæ in front crimson; coxæ crimson; legs tinged with crimson in front; abdomen ventrally pale crimson. Fore wing red-brown; a crimson streak below costa from near base to near apex; a small crimson spot above base of vein 2 and small spots in and beyond end of cell. Hind wing red-brown.

Hab. Angola, N'Dalla Tando (*Ansorge*), type † ♂ in Coll. Bethune-Baker. *Exp.* 34 millim.

*279 *c*. **Metarctia rubrovitta.**

Metarctia rubrovitta, Auriv. Ark. f. Zool. ii. 4, p. 31 (1904); Roths. Nov. Zool. xix. pl. xiv. f. 41.

♀. Head and thorax pale fulvous brown, palpi and a line behind the eyes scarlet; antennæ pale yellow; metathorax with scarlet patch; legs yellowish, the fore coxæ scarlet, the femora and tibiæ above tinged with scarlet; abdomen pale brown with scarlet dorsal bands, the extremity yellow. Fore wing pale brown; a scarlet streak below costa; some scarlet at base of inner margin; an oblique scarlet spot below base of vein 2; a spot in end of cell and spots beyond the cell above veins 3 and 5 and small spot above 4; a subterminal series of scarlet spots, almost obsolete towards apex, more prominent towards tornus. Hind wing scarlet, the cilia pale brown. Underside of fore wing with the cell to near extremity and inner area to near tornus scarlet; a spot in end of cell and obliquely curved fascia above vein 2; hind wing pale brown with the cell and inner area scarlet.

Hab. Cameroons, type † ♀ in Mus. Stockholm. *Exp.* 40 millim.

*280 *a*. **Metarctia ferrigera.** (Plate III. fig. 31.)

Metarctia ferrigera, Druce, A. M. N. H. (8) v. p. 395 (1910).

♀. Head, thorax, and abdomen brown mixed with ochreous; palpi fuscous with some crimson at sides; antennæ black with some ochreous scales on upperside of shaft, the basal joint crimson; legs

streaked with pale crimson. Fore wing ochreous suffused with fuscous brown; a wedge-shaped ochreous patch in middle of cell and two small spots below the middle; a lunule beyond the cell and an oblique postmedial series of small lunules; a subterminal band formed of ochreous patches in the interspaces. Hind wing pale yellow faintly tinged with crimson, the cilia brownish; the underside yellow faintly suffused with brown.

Hab. Cameroons, Ja R., Bitje (*Bates*), type † ♀ in Coll. Joicey. *Exp.* 64 millim.

*280 *b*. Metarctia taymansi.

Metarctia taymansi, Roths. Nov. Zool. xvii. p. 442 (1910), & xix. pl. xiv. f. 43.

♂. Head and thorax dark brown slightly mixed with ochreous; femora above and the tarsi pale crimson; abdomen brown mixed with ochreous, the ventral surface pale. Fore wing dark reddish brown; a subbasal ochreous white spot below the cell, a wedge-shaped patch in middle of cell enclosing a brown spot, medial spots below the cell and above and below vein 1, a spot above base of vein 2 and spots beyond the cell and above base of vein 6, a subterminal series of elongate rather wedge-shaped spots, those above veins 4, 3 running to the cell and traversed by a faint brown band; a waved brown line before termen; the termen and cilia ochreous white. Hind wing ochreous white.

Hab. Congo, Kassai (*Taymans*), type † ♂ in Coll. Rothschild. *Exp.* 50 millim.

*281 *a*. Metarctia nigriceps. (Plate III. fig. 32.)

Metarctia nigriceps, Auriv. Ark. f. Zool. ii. 4, p. 30 (1904).

♀. Head brown; palpi and lower part of frons scarlet with some brown scales; antennæ white at tips, thorax and abdomen scarlet, pectus and ventral surface of abdomen orange; legs orange, the tibiæ brown, the tarsi brown with slight orange rings. Fore wing scarlet irrorated with brown, the veins slightly streaked with brown, the costal edge brown; an indistinct diffused curved antemedial line, an indistinct brown bar across the cell towards extremity; an indistinct diffused curved postmedial line from costa to vein 3; cilia brown. Hind wing scarlet, the veins streaked with brown towards termen; cilia brown. Underside of both wings largely suffused with brown.

Hab. Cameroons, type † ♀ in Mus. Stockholm. *Exp.* 44 millim.

*283 *a*. Metarctia rubribasa. (Plate IV. fig. 1.)

Metarctia rubribasa, Beth.-Baker, A. M. N. H. (8) vii. p. 533 (1911).

♀. Head crimson; palpi fringed with brown hair in front, the 3rd joint and antennæ blackish; thorax red-brown mixed with

crimson; pectus and femora crimson, the tibiæ and tarsi brown; abdomen red-brown, the base, anal tuft, and ventral surface crimson. Fore wing bright red-brown; some crimson at base; the costal edge tinged with crimson. Hind wing and underside of both wings pale crimson.

Hab. Angola, N'Dalla Tando (*Ansorge*), type † ♀ in Coll. Bethune-Baker. *Exp.* 42 millim.

*283 *b*. **Metarctia erlangeri.**

Metarctia erlangeri, Roths. Nov. Zool. xvii. p. 442 (1910), ♀, & xix. pl. xiv. f. 44.
Metarctia diversa, Beth.-Baker, A. M. N. H. (8) vii. p. 532 (1911), ♂.

♂. Head pale crimson, the palpi, sides of frons, and antennæ dark brown; thorax red-brown mixed with pale crimson; pectus and femora pale crimson, the tibiæ and tarsi dark brown; abdomen pale crimson with a dark brown band before anal tuft and bands on ventral surface. Fore wing red-brown, the costal edge pale crimson. Hind wing pale crimson.

♀. Fore wing with the costal edge red-brown, the cilia pale crimson.

Hab. Abyssinia, Arusi-Galla Country (*Erlanger*), type † ♀ in Coll. Rothschild; Angola, Muhumbua, Bihé, N'Dalla Tando (*Ansorge*), type † ♂ *diversa* in Coll. Bethune-Baker. *Exp.* ♂ 46, ♀ 56 millim.

287 *a*. **Metarctia pulverea.** (Plate IV. fig. 2.)

Metarctia pulverea, Hmpsn. A. M. N. H. (7) xix. p. 225 (1907).

♀. Head and thorax rufous; abdomen greyish tinged with rufous. Fore wing rufous thickly irrorated with black; a small blackish spot above base of vein 2; a diffused blackish discoidal patch. Hind wing greyish tinged with rufous.

Hab. Uganda, Ruwenzori, 6000 ft. (*Wollaston*), 1 ♀ type. *Exp.* 42 millim.

287 *b*. **Metarctia phæoptera.** (Plate IV. fig. 3.)

Metarctia phæoptera, Hmpsn. A. M. N. H. (8) iv. p. 344 (1909).

♀. Head and thorax fuscous brown; antennæ with some pink hair on basal joint in front; prothorax with a slight pink spot; pectus with lateral pinkish streaks; coxæ and femora with some pinkish hair; abdomen dark brown with pinkish segmental rings. Fore wing uniform fuscous brown, the cilia greyish at tips. Hind wing fuscous brown, the disk somewhat semihyaline; cilia greyish at tips.

Hab. Upper Congo (*Wollaston*), 1 ♀ type. *Exp.* 34 millim.

287 *c*. **Metarctia pumila.** (Plate IV. fig. 4.)

Metarctia pumila, Hmpsn. A. M. N. H. (8) iv. p. 344 (1909).

♂. Head and thorax dark reddish brown; abdomen yellowish suffused with red-brown. Fore wing uniform red-brown with a greyish tinge. Hind wing white suffused with ochreous.

♀. Head and thorax fuscous brown; sides of pectus and coxæ with some yellow; abdomen yellowish suffused with fuscous brown forming obscure bands, the ventral surface fuscous brown with paired series of yellowish spots; fore wing uniform fuscous brown; hind wing fuscous brown with the interspaces of disk semihyaline.

Hab. Uganda, White Nile, Gondokoro (*Reynes-Cole*), 2 ♂, 2 ♀ type. *Exp.* ♂ 32, ♀ 36 millim.

288 *a*. **Metarctia hæmatricha.** (Plate IV. fig. 5.)

Metarctia hæmatricha, Hmpsn. A. M. N. H. (7) xv. p. 426 (1905).

♂. Fuscous brown; head, thorax, and abdomen clothed chiefly with blood-red hair. Fore wing with some blood-red hair at base. Hind wing with the inner area tinged with blood-red.

Hab. Abyssinia, Kutai Metha (*Degen*), 1 ♂ type. *Exp.* 44 millim.

289 *a*. **Metarctia metaleuca,** n. sp. (Plate IV. fig. 6.)

♂. Head and thorax fuscous brown; abdomen pale grey-brown. Fore wing uniform fuscous brown. Hind wing brownish white, the costa brown to beyond middle.

Hab. Liberia, Nanna Kru (*Lowe*), 1 ♂ type. *Exp.* 32 millim.

289 *b*. **Metarctia fusca.** (Plate IV. fig. 7.)

Metarctia fusca, Hmpsn. A. M. N. H. (7) viii. p. 169 (1901).

♂. Dark smoky brown; antennæ with the shaft fulvous above towards base and at tips. Fore wing with pale ochreous points below base of vein 2 and above veins 4, 5. Hind wing somewhat paler.

Hab. Br. E. Africa, Kikuyu, Roromo (*Crawshay*), 1 ♂ type; Uganda, Ruwenzori (*Wollaston*), 1 ♂. *Exp.* 36 millim.

289 *c*. **Metarctia flavivena.** (Plate IV. fig. 8.)

Metarctia flavivena, Hmpsn. A. M. N. H. (7) viii. p. 169 (1901).

♂. Head, thorax, and abdomen crimson; antennæ, tegulæ except edges, patagia, stripes on thorax, and the greater part of legs black; abdomen with slight segmental black lines, one on terminal segment more prominent, the ventral surface yellow with black bands. Fore wing fuscous black, the veins, costa, inner margin,

and cilia yellow. Hind wing yellow with fuscous fascia on costal area; some crimson hair at base of inner margin.

♀. Abdomen with the black bands rather more prominent; hind wing with the interspaces of costal half suffused with black.

Hab. Br. E. Africa, Machakos (*Crawshay*), 1 ♂, 1 ♀ type, Njoro (*Cholmley*, *Betton*), 3 ♂, Nakutu (*Bodeker*), 2 ♂, Nakuru (*Bodeker*), 2 ♂; Uganda (*Christy*), 1 ♂, Entebbe (*Minchin*), 1 ♂, Mulema (*Doggett*), 1 ♂, L. Albert Edward (*Wollaston*), 1 ♂, Ruwenzori (*Wollaston*), 2 ♂; Mashonaland, Salisbury (*Marshall*), 4 ♂, 4 ♀. *Exp.* ♂ 42, ♀ 46 millim.

Subsp. 1. Fore wing with the veins scarlet; hind wing with the interspaces filled in with fuscous.

Hab. Abyssinia, Zegi Tsana (*Degen*), 2 ♂.

Subsp. 2. Fore wing with the veins scarlet; hind wing pale crimson.

Hab. N. Nigeria, Bauchi Prov., Panyam (*Fox*), 4 ♂.

290 *a*. **Metarctia flaviciliata.** (Plate IV. fig. 9.)

Metarctia flaviciliata, Hmpsn. A. M. N. H. (7) xix. p. 225 (1907).

♂. Head and tegulæ scarlet; palpi, sides of frons, and antennæ fuscous; thorax fuscous, the patagia with scarlet edges towards base, the vertex with scarlet stripe; tibiæ and tarsi fuscous; abdomen scarlet, the last two segments and ventral surface with fuscous bands. Fore wing fuscous brown, the cilia ochreous yellow. Hind wing pale fuscous, the base whitish, the inner margin yellow with some scarlet hair towards base; cilia ochreous yellow. Underside of fore wing yellowish, the costal and apical area to vein 2 suffused with fuscous brown, the cell clothed with scarlet hair; hind wing yellowish with the costal area suffused with fuscous.

♀. Abdomen with narrow fuscous dorsal bands and broad band just before extremity; fore wing fuscous black, hind wing fuscous, the cilia of both wings yellow, the underside similar.

Hab. Uganda, Siroko R. nr. Mt. Elgon (*Neave*), 1 ♂, Toro, Daro Forest (*Neave*), 1 ♂, Beni Semliki (*Legge & Wollaston*), 1 ♂, 1 ♀ type. *Exp.* ♂ 48, ♀ 58 millim.

290 *b*. **Metarctia flavicincta.** (Plate IV. fig. 10.)

Metarctia flavicincta, Auriv. Öfv. K. Vet.-Akad. Förh. lvii. p. 1057 (1900).
Metarctia sarcosoma, Hmpsn. A. M. N. H. (7) viii. p. 170 (1901).
Metarctia contrasta, Beth.-Baker, A. M. N. H. (8) vii. p. 533 (1910).
Metarctia uniformis, Beth.-Baker, A. M. N. H. (8) vii. p. 534 (1910).

♂. Head, thorax, and abdomen flesh-pink; palpi, antennæ, a patch on thorax, tibiæ and tarsi brown; abdomen with the ventral surface fulvous yellow with fuscous bands. Fore wing fuscous brown, the inner margin and cilia ochreous. Hind wing ochreous.

Ab. 1. *contrasta*. Head, thorax, and abdomen deeper crimson.

Ab. 2. *uniformis*. Head, thorax, and abdomen ochreous tinged with fulvous.

Hab. Gold Coast, Kumasi (*Sanders*), 1 ♂; Congo, type † ♂ in Mus. Stockholm; Portuguese W. Africa, Malange, type † ♂ *uniformis* in Coll. Bethune-Baker; Angola, N'Dalla Tando (*Ansorge*), type † ♂ *contrasta* in Coll. Bethune-Baker; Br. E. Africa, Machakos (*Crawshay*), 1 ♂ type *sarcosoma*, Nairobi (*Crawshay*), 1 ♂; Uganda (*Doggett*), 1 ♂, Entebbe (*Minchin*), 3 ♂, Bugoma (*Ladbury*), 1 ♂. *Exp.* 44 millim.

*290 *c*. **Metarctia noctis**. (Plate IV. fig. 11.)

Metarctia noctis, Druce, A. M. N. H. (8) v. p. 394 (1910).

♂. Haad, tegulæ, and shoulders fulvous yellow, the rest of thorax fuscous brown, palpi and sides of frons fuscous; pectus and legs fulvous yellow; abdomen fuscous with some yellow hairs, the ventral surface fulvous yellow. Fore wing fuscous, the costal edge yellow towards base. Hind wing fuscous, the interspaces whitish and thinly scaled except towards margins; the underside with the basal half yellowish.

Hab. Abyssinia, Diré Daoná (*Kristensen*), type † ♂ in Coll. Joicey. *Exp.* 32 millim.

290 *d*. **Metarctia bicolora**. (Plate IV. fig. 12.)

Decimia bicolora, Wlk. vii. 1718 (1856).

♂. Head and thorax fulvous yellow, the dorsum of pro- and mesothorax brown; antennæ brown except the shaft above towards base; palpi brown; abdomen fulvous yellow with diffused dorsal brown bands on each segment. Fore wing brown, the costal edge and cilia yellow; some yellow hair at base of inner margin; the interspaces just below end of cell somewhat semihyaline. Hind wing brown, the interspaces semihyaline except towards termen; cilia yellow; some yellow hair on inner margin.

Hab. Natal, Maritzburg (*Berensbury*), 1 ♂, Durban, 1 ♂ type. *Exp.* 34–36 millim.

290. **Metarctia meteus** del. *Decimia bicolora*.

Larva. Fawcett, Trans. Zool. Soc. xvii. p. 178, pl. vii. ff. 15–19.

Black above, reddish ochreous below; each somite with eight tubercles from which spring six tufts of long and short black hairs, the long hairs greyish at tips, the two lower tubercles with tufts of red hair; head red; spiracles black; legs and claspers reddish.

Food-plants: *Gnidia*, *Lasiosiphon*, and *Acalypha*.

292 *a*. **Metarctia fulvia.** (Plate IV. fig. 13.)

Metarctia fulvia, Hmpsn. A. M. N. H. (7) viii. p. 170 (1901).
Metarctia pallens, Beth.-Baker, A. M. N. H. (8) vii. p. 532 (1911).

♂. Uniform fulvous yellow; palpi, side of frons, and fore coxæ and femora above tinged with fuscous. Fore wing with traces of discoidal spot; the interspaces below vein 5 and hind wing somewhat paler.

Ab. 1. *pallens*. Fore wing with diffused blackish fascia on costal area to near apex and on vein 1 to tornus.

Hab. Br. E. Africa, Athi-ya-Mawe (*Betton*), 3 ♂ type; Angola, N'Dalla Tando (*Ansorge*), type † ♂ *pallens* in Coll. Bethune-Baker. *Exp.* 36–40 millim.

292 *b*. **Metarctia pallida.** (Plate IV. figs. 14, 15.)

Metarctia pallida, Hmpsn. A. M. N. H. (7) viii. p. 170 (1901).

♂. Head and tegulæ brownish yellow; palpi and lower part of frons dark brown; thorax brown; abdomen and greater part of pectus and legs ochreous. Fore wing grey brown with slight yellowish brown streaks on costal and inner areas. Hind wing pale ochreous.

Hab. Br. E. Africa, Kikuyu, Roromo, 1 ♂, Nairobi (*Crawshay*), 1 ♂ type, Uganda Ry., Mile 478 (*Betton*), 2 ♂, El Burgon (*Betton*), 1 ♂, Njoro (*Cholmley*), 2 ♂. *Exp.* 32–34 millim.

Subsp. 1. Head, tegulæ, and abdomen fulvous yellow.

Hab. Gold Coast, Kumasi (*Whiteside*), 1 ♂; Abyssinia, Dembratscha, Zegi Tsana, Addis Ababa (*Degen*), 5 ♂.

Genus *Pseudapiconoma*, insert:—

BALACRA, Wlk. vii. 1721 (1856) ..... type *cæruleifascia*, which has priority.

Megapisa, Auriv. Ark. f. Zool. ii. 4, p. 29 (1904) ..... type *nigripennis*.

*293 *a*. **Balacra rubrostriata.**

Metarctia rubrostriata, Auriv. Ent. Tidskr. 1898, p. 185; Roths. Nov. Zool. xix. pl. xiv. f. 37.

Hind wing with veins 4, 5 on a long stalk, 7 obsolete.

♀. White; frons between antennæ, part of tegulæ, and the extremity of abdomen pale yellow; antennæ, palpi, and legs in front black; abdomen with dorsal red bands on 1st six segments interrupted at middle, lateral, sublateral, and ventral black spots

except at extremity. Fore wing pale yellow; the costa and inner margin except towards base black; the veins mostly streaked with black; a black streak in cell forked on discocellulars, and a

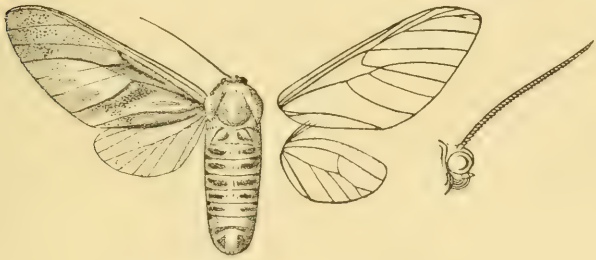

Fig. 14.—*Balacra rubrostriata*, ♀. ½.

diffused oblique fascia below vein 2. Hind wing entirely white. Underside of fore wing with diffused fuscous subapical spots between veins 8 and 5.

Hab. Togoland (*R. Büttner*), type † in Mus. Stockholm. *Exp.* 58 millim.

293 *b*. Balacra nigripennis.

Megapisa nigripennis, Auriv. Ark. f. Zool. ii. 4, p. 30 (1904), June.
Pseudapiconoma gloriosa, Jord. Nov. Zool. xi. p. 441 (1904), Sept.; Roths. Nov. Zool. xix. pl. xiv. f. 31.
Pseudapiconoma speculigera, obliterata, Grünb. Deutsch. Ent. Zeit. 1907, p. 435.

♀. Head and thorax blue-black; frons with crimson lateral stripes; basal joint of antennæ with crimson spots; patagia with crimson stripes; thorax with crimson stripes followed by spots on metathorax; fore coxæ crimson on inner side; pectus with some crimson; abdomen black shot with blue and with series of crimson bands except on terminal segment, dorsally incomplete at base, a sublateral series of crimson spots. Fore wing black-brown slightly tinged with blue at base; two crimson points at base of median nervure; hyaline spots in upper end of cell and below base of vein 2; a series of spots beyond the cell between veins 8 and 3, the spot above vein 5 largest. Hind wing black-brown slightly shot with blue, the base of inner margin crimson.

Hab. Centr. Africa, type † ♀ in Mus. Stockholm; Cameroons; Congo, Katanga, Kambove (*Neave*), 2 ♀; Angola, Pungo Andongo (*Hofmeyer*), type † ♀ *gloriosa* in Coll. Rothschild. *Exp.* 72 millim.

*293 *c*. Balacra compsa.

Pseudapiconoma compsa, Jord. Nov. Zool. xi. p. 441 (1904); Roths. Nov. Zool. xix. pl. xiv. f. 42.
Pseudapiconoma stigmatica, Grünb. Deutsch. Ent. Zeit. 1907, p. 435, pl. iv. fig. 6.

♂. Head and thorax dark brown; basal part of antennæ crimson at sides; tegulæ edged with orange behind; thorax with pair of orange streaks; fore coxæ at sides and femora above crimson; abdomen with the basal segments crimson at sides, dark brown on dorsum and the 3rd segment, the terminal segments grey dorsally indenting the dark brown on 3rd segment, the anal segment with some dark brown and orange hair, dark lateral stripes with fringes of orange hair, the ventral surface grey with some crimson hair at base and dark pair of spots on 2nd segment. Fore wing dark brown; two small orange spots at base of inner margin; obliquely placed hyaline spots below base of vein 2 and on vein 1, a quadrate patch in end of cell, a small spot above base of vein 6 and spots above and below vein 7 nearer apex, a series of large patches between vein 6 and inner margin, below vein 4 extending almost to termen and above veins 3, 2 to cell. Hind wing greyish fuscous, the cell and interspaces just below and beyond it hyaline.

♀. Tegulæ and thorax without yellow; fore legs without crimson; abdomen wholly brown with paired subdorsal and lateral series of black points and a slight lateral tuft of orange hair at extremity; fore wing without the orange or hyaline spots on basal brown area; hind wing dark brown with the interspaces below and beyond the cell clear hyaline.

Hab. Angola, Pungo Andongo (*Hofmeyer*), type † ♂ in Coll. Rothschild; Uganda. *Exp.* ♂ 44, ♀ 62 millim.

*294 *a*. Balacra affinis.

Pseudapiconoma affinis, Roths. Nov. Zool. xvii. p. 442 (1910), & xix. pl. xiii. f. 20.

♂. Head and tegulæ yellow, frons brown; palpi, antennæ, and a line round the eyes crimson; thorax brown with some crimson at base of patagia and sides of metathorax; femora streaked with crimson, the tibiæ and tarsi brownish white; abdomen brown with crimson bands edged with whitish, rather broadly on 2nd and 3rd segments, the ventral surface crimson, the segments edged with whitish. Fore wing red-brown with crimson streak below costa to beyond middle and diffused crimson streaks in the interspaces of terminal half. Hind wing with the basal half whitish, the terminal half reddish brown.

Hab. Congo, Kassai (*Taymans*), type † ♂ in Coll. Rothschild. *Exp.* 36 millim.

294 *b*. Balacra fenestrata.

Pseudapiconoma fenestrata, Jord. Nov. Zool. xi. p. 442 (1904); Roths. Nov. Zool. xix. pl. xiv. f. 35.
Pseudapiconoma melæna, Hmpsn. A. M. N. H. (7) xv. p. 426 (1905).

♀. Head and thorax deep olive-brown; abdomen deep olive-brown dorsally suffused with green except 1st two segments, the lateral tufts orange at tips. Fore wing deep olive-brown; a triangular hyaline spot in end of cell; an oblique curved spot below base of vein 2 with a round spot below it and an elongate spot above inner margin with its upper edge indented; a wedge-shaped spot above vein 7, a small triangular spot above base of vein 6 and quadrate spot above its middle, a large quadrate spot above vein 5, an elongate spot above 4, quadrate spot above 3, very large elongate patch above 2 and quadrate patch above 1. Hind wing deep olive-brown, the cell and inner area thinly scaled; a small hyaline spot above vein 5 and small elongate spots from below 5 to before 2.

Hab. Angola, Pungo Andongo (*Hofmeyer*), type † ♀ in Coll. Rothschild; Uganda, Mosaka (*Christy*), 1 ♀ type *melæna*. *Exp.* 54 millim.

*294 *c*. Balacra vitreata.

Pseudapiconoma vitreata, Roths. Nov. Zool. xvii. p. 445 (1910), & xix. pl. xiv. f. 36.

♀. Head, thorax, and abdomen brown tinged with greyish, the last with small subdorsal black spots at base of the segments, except the basal segment, and minute lateral tufts of yellowish scales on terminal segments. Fore wing reddish brown; a quadrate hyaline patch in the cell towards its extremity; the interspaces of terminal half hyaline, with brown patches in and beyond end of cell and above base of vein 6; a brown patch on apical part of termen extending to below vein 3, towards which it narrows, its inner edge incurved below vein 6 and at vein 3; a faint brownish spot with a minute dark spot on it between veins 2 and 1 below end of cell. Hind wing hyaline, the veins, margins, and cell brown, the inner edge of the terminal band slightly angled inwards at veins 4 and 3.

Hab. "Africa," type † ♀ in Coll. Rothschild. *Exp.* 60 millim.

*294 *d*. Balacra umbra.

Pseudapiconoma umbra, Druce, A. M. N. H. (8) v. p. 394 (1910); Roths. Nov. Zool. xix. pl. xiv. f. 30.

♀. Head and thorax greyish brown with some reddish hairs; the eyes defined by crimson; femora crimson above; abdomen grey-brown with dull reddish segmental bands, the ventral surface

darker brown. Fore wing umber-brown, the inner area greyer brown; some reddish hair at base of inner margin; small hyaline spots in upper part of cell towards extremity and below base of vein 2; five rounded hyaline postmedial spots between veins 7 and 2, the spot below vein 3 small. Hind wing grey-brown with some reddish hair at base; small elliptical hyaline spots below bases of veins 4, 3. Underside of fore wing with the inner area pale reddish to beyond middle.

Hab. Cameroons, Ja R., Bitje (*Bates*), type † ♀ in Coll. Joicey. *Exp.* 64 millim.

294 *e*. Balacra preussi.

Metarctia preussi, Auriv. Ark. f. Zool. ii. 4, p. 31 (1904), ♂; Roths. Nov. Zool. xix. pl. xiv. ff. 38, 39.
Pseudapiconoma preussi, brunnea, Grünb. Deutsch. Ent. Zeit. 1907, p. 434, pl. iv. f. 4, ♂; Roths. Nov. Zool. xix. pl. xiv. f. 40.
Pseudapiconoma speculigera, Grünb. Deutsch. Ent. Zeit. 1907, p. 434, pl. iv. f. 5, ♀.
Pseudapiconoma laureola, Druce, A. M. N. H. (8) v. p. 393 (1910).
Pseudapiconoma guilliemi, Oberth. Ann. Soc. Ent. Fr. lxxix. p. 469, pl. 17. f. 11 (1911).

♂. Head and thorax pale brown, the sides of frons, base of antennæ, and tips of tegulæ scarlet, tips of patagia and spots on thorax orange; abdomen pale brown with orange-red segmental bands, the anal tuft orange; pectus scarlet in front, the legs streaked with crimson. Fore wing yellow-brown; three crimson points near base; a hyaline spot edged with scarlet in end of cell and another below base of vein 2; five hyaline spots slightly edged with scarlet beyond the cell. Hind wing pale yellowish, the cell hyaline, the inner area tinged with scarlet.

Ab. 1. *laureola*. Fore wing with the postmedial hyaline spots larger and without red edges.

Ab. 2. *brunnea*. Head, thorax, and fore wing browner, the last without red edges to the spots.

♀. Head and thorax brown tinged with grey; palpi at base, sides of frons, and gulæ crimson; tips of tegulæ, upper edge of patagia, and metathorax dull crimson; coxæ, femora, and tibiæ on inner side crimson; abdomen dull crimson banded with brown tinged with grey, the ventral surface with the crimson bands narrow. Fore wing dark reddish brown, the base of inner margin tinged with crimson; a small triangular hyaline spot in cell above origin of vein 2; a small elliptical hyaline spot edged with crimson below origin of vein 2; four rounded hyaline postmedial spots between veins 7 and 3 defined by dark brown, the uppermost spot smaller, and a slight dark spot below vein 3. Hind wing crimson red, the veins and cilia brownish; the underside with the costal half suffused with brown.

Hab. S. Nigeria, Yorubaland, Ogbomoso (*Carter*), 1 ♂; Cameroons, Ja R., Bitjé; Germ. E. Africa, Tanganyika, M'pala. *Exp.* ♂ 46, ♀ 56 millim.

294*f*. Balacra batesi.

Pseudapiconoma batesi, Druce, A. M. N. H. (8) v. p. 393 (1910); Roths. Nov. Zool. xix. pl. xiv. ff. 25, 26.
Pseudapiconoma congoensis, Roths. Nov. Zool. xvii. p. 443 (1910), & xix. pl. xiv. f. 27.
Pseudapiconoma batesi, ugandæ, Roths. Nov. Zool. xvii. p. 433 (1910), & xix. pl. xiv. f. 34.

♀. Head, thorax, and abdomen orange-yellow, the dorsum of thorax brownish; palpi and legs crimson, the fore tibiæ streaked with blackish; antennæ black, the basal joint crimson; abdomen with greyish black dorsal and lateral bands, the ventral surface with slight segmental black lines on terminal segments, the extremity crimson. Fore wing deep chocolate-brown with some pale crimson at base of costa and inner margin; a crimson streak on subcostal nervure to beyond middle; a quadrate yellow spot in middle of cell, pear-shaped spot below base of vein 2 and small oblique spot above base of vein 2, all edged with crimson; small yellow postmedial spots edged with crimson above and below vein 6. Hind wing uniform orange-yellow. Underside of fore wing yellow to the medial spots, a small postmedial yellow spot edged with crimson in discal fold.

♂. Thorax yellower; abdomen with hardly any crimson at extremity, the bands reduced to narrow black lines.

Ab. 1. *congoensis*. Fore wing with hardly any trace of the crimson streak below costa, the spots smaller and obsolete between veins 4 and 3,

Ab. 2. *ugandæ*. Similar to the type, but fore wing yellower brown with the crimson streak below costa obsolescent.

Hab. Gold Coast; S. Nigeria, Ilesha (*Humfrey*), 1 ♂; Cameroons, Ja R., Bitje (*Bates*), type† ♀ in Coll. Joicey; Congo, Bonoto, Kassai, Luebo (*Landbeck*), type ♀ *congoensis* in Coll. Rothschild; Uganda, Entebbe (*Jackson*), type† ♀ *ugandæ* in Coll. Rothschild, Boddo (*Neave*), 1 ♀. *Exp.* 46 millim.

295. **Balacra flavimacula** del. *P. testacea* and *B. hæmalea* and insert:—

Pseudapiconoma flavimacula var. *decora*, Oberth. Ann. Soc. Ent. Fr. lxxix. p. 470, pl. 17. f. 10 (1911), which is the typical form, whilst f. 8 is a form with the hind wings redder.

Cameroons.

295 *a*. Balacra testacea.

Pseudapiconoma testacea, Auriv. Ent. Tidskr. ii. p. 46, f. 1 (1881); Roths. Nov. Zool. xix. pl. xiii. ff. 21, 22.

♂. Head, thorax, and abdomen scarlet; antennæ brownish except towards base. Fore wing scarlet suffused with greyish brown, the interspaces of terminal area less suffused; some scarlet at base of

inner margin; a scarlet streak below costa to beyond middle; a scarlet spot in end of cell and a spot below base of vein 2 with small yellow centre; a scarlet postmedial spot with yellow centre in discal fold and small scarlet spots above vein 6 and below 5. Hind wing pale scarlet.

Ab. 1. Fore wing with the spots smaller and without yellow centres.

Hab. Gold Coast, Kumasi (*Whiteside*), 1 ♂; S. Nigeria, Lagos (*Dudgeon*), 1 ♂, Ebute Meta (*Boag*), 1 ♂, Yorubaland, Ogbomoso (*Carter*), 1 ♂, Old Calabar (*Crompton*), 1 ♂, Onitsha, 1 ♂; Gaboon, type † in Mus. Stockholm; Uganda, Entebbe (*Wollaston*), 1 ♂. *Exp.* 42–46 millim.

295 *b*. **Balacra cæruleifascia**, Wlk. trans. from *Metarctia* no. 277.

Roths. Nov. Zool. xix. pl. xiii. ff. 8, 9.

♂. Head, thorax, and abdomen scarlet; antennæ brown; tarsi brownish white; abdomen with slight dorsal segmental blackish bands with whitish dorsal points on them. Fore wing red-brown; small scarlet spots at base on costa and inner margin and below the cell, followed by a spot in the cell; a triangular patch below base of vein 2 and small spots in and below end of cell; postmedial spots above and below vein 6. Hind wing scarlet.

*295 *c*. Balacra hæmalea.

Balacra hæmalea, Holl. Psyche, vi. p. 397 (1893); Roths. Nov. Zool. xix. pl. xiii. ff. 17, 18.

♂. Head, thorax, and abdomen crimson; antennæ except towards base brown with a bluish tinge, the extreme tips white. Fore wing grey-brown; a crimson streak below costa to beyond middle; the basal inner area crimson; a crimson spot in end of cell and a spot with yellow centre below base of vein 2; crimson spots above and below base of vein 6 and a slight spot below vein 5, the spot below vein 6 with yellowish centre; the interspaces of terminal area suffused with crimson, rather narrowly towards apex, below vein 3 extending almost to the cell. Hind wing pale crimson.

Hab. Cameroons; Gaboon, Ogové R., type † in Coll. Holland, Bule Co.; Congo, Yakusu. *Exp.* 52 millim.

295 *d*. Balacra intermedia.

Balacra intermedia, Roths. Nov. Zool. xix. p. 120, pl. xiv. f. 23 (1912).

♂. Head scarlet, the vertex flesh-yellow; palpi at tips and antennæ bluish black; thorax reddish yellow; pectus and legs scarlet, streaks on tibiæ and the tarsi grey-brown suffused with bluish; abdomen reddish yellow with a small V-shaped black mark at base of anal segment. Fore wing grey-brown; a subbasal scarlet spot below costa and some reddish yellow at base of inner

margin ; a scarlet bar with some yellow in centre across end of cell ; an oblique yellow spot defined by scarlet below base of vein 2 and a minute scarlet spot above its base ; postmedial scarlet spots above and below vein 6 and a minute spot below vein 5. Hind wing yellow, the inner half suffused with scarlet. Underside of fore wing with the inner area yellowish, the cell and a spot beyond it scarlet ; hind wing yellow tinged with scarlet.

Hab. Sierra Leone (*Bartlett*), 1 ♂ type. *Exp.* 50 millim.

295 *e*. **Balacra humfreyi.**

Balacra humphreyi, Roths. Nov. Zool. xix. p. 119, pl. xiii. f. 14 (1912).

♂. Head scarlet, the back of head reddish yellow ; palpi whitish at tips ; antennæ grey-brown ; thorax reddish yellow ; pectus and legs scarlet, stripes on tibiæ and the tarsi grey-brown ; abdomen reddish yellow, the ventral surface scarlet. Fore wing grey-brown faintly tinged with scarlet ; a subbasal scarlet mark below costa and some reddish yellow at base of inner margin ; a yellow bar edged with scarlet across end of cell and pear-shaped spot below base of vein 2 with faint scarlet spot above base of vein 2 ; postmedial yellow spots edged with scarlet above and below vein 6. Hind wing yellow, the inner half tinged with scarlet. Underside of fore wing with the cell and inner area reddish yellow, a yellowish spot beyond the cell.

Hab. S. Nigeria, Ilesha (*Humfrey*), 4 ♂ type. *Exp.* 52 millim.

295 *f*. **Balacra rattrayi.**

Metapiconoma rattrayi, Roths. Nov. Zool. xvii. p. 444 (1910), & xix. pl. xiii. ff. 12, 13.

♂. Head scarlet, the back of head yellow ; antennæ blackish ; tegulæ grey at base, yellow at tips ; patagia yellow with the upper edge grey ; dorsum of thorax grey with paired yellow marks on meso- and metathorax ; pectus and legs scarlet, the tibiæ above and tarsi grey-brown ; abdomen yellow with bluish grey segmental bands. Fore wing with the basal half pale grey-brown, the terminal half yellowish, the outer edge of the brown area oblique and sinuous ; a scarlet streak below costa from near base to beyond middle, some yellowish at base of inner margin ; an antemedial scarlet spot below vein 1 ; a yellow spot in end of cell and oblique spot below base of vein 2. Hind wing yellow, the inner area tinged with scarlet. Underside of fore wing yellow with a pale scarlet streak below costa to beyond middle.

♀. Thorax darker grey-brown with the markings redder ; abdomen with the bands blue-black ; fore wing with the ground-colour red-brown, a semihyaline white spot edged with yellow in end of cell and an obliquely curved series beyond the cell from above vein 6

to below 2, the spot above vein 2 small and faint; hind wing with the base and inner area more strongly tinged with scarlet.

Hab. Uganda, Toro, Daro Forest (*Neave*), 1 ♂, 1 ♀, Mpumu (*Sir D. Bruce*), 1 ♀. *Exp.* ♂ 46, ♀ 64–70 millim.

295 *g*. **Balacra erhmanni.**

Automolis erhmanni, Holl. Psyche, vi. p. 535 (1893); Roths. Nov. Zool. xix. pl. xiii. ff. 10, 11.

♂. Head scarlet; antennæ except at base brown with a grey-blue gloss; thorax pale scarlet, the tegulæ at base and patches on pro- and mesothorax pale grey; pectus and legs scarlet, the tibiæ above and the tarsi pale grey; abdomen pale scarlet, the two basal segments with some pale grey at base of dorsum. Fore wing pale grey-brown; a scarlet streak below costa to beyond middle; the basal inner area scarlet; pale scarlet spots in end of cell and below base of vein 2; an obliquely curved pale scarlet maculate band beyond the cell from above vein 6 to vein 2; the interspaces of terminal area suffused with pale scarlet. Hind wing pale scarlet. Underside of fore wing pale scarlet.

♀. Head and thorax chocolate-brown, some scarlet on vertex of head, the tegulæ at tips, edges of patagia, subdorsal streaks on thorax, and patches on metathorax scarlet; pectus with some brown at sides; legs brown, the femora scarlet above; abdomen scarlet with segmental brown bands except at extremity tinged with blue-grey except towards base. Fore wing chocolate-brown, slight dull scarlet basal and subbasal spots in cell and some dull scarlet at base of inner margin, a minute hyaline spot in upper part of extremity of cell and elliptical spot below base of vein 2, a curved postmedial series of four hyaline spots from above vein 6 to below 4, the spot below vein 6 larger.

Hab. Liberia, type † ♂ in Coll. Holland; Gold Coast (*Johnston*), 2 ♂, Bibianaha (*Spurrell*), 3 ♂, 2 ♀, Kumasi (*McDowall, Whiteside*), 3 ♂; S. Nigeria, Lagos, Ebute Meta (*Boag*), 1 ♂, Oshogbo (*Simpson*), 1 ♂. *Exp.* ♂ 46–58, ♀ 70–76 millim.

296. **Balacra ochracea**, insert (syn.):—

Pseudapiconoma conradti, Oberth. Ann. Soc. Ent. Fr. lxxix. p. 471, pl. 17. f. 12 (1911).

Hab. S. Nigeria, Old Calabar (*Crompton*), 1 ♂, Ilesha (*Humfrey*), 1 ♂; Cameroons, Lolodorf; Congo.

296 *a*. **Balacra inflammata**, n. sp. (Plate IV. fig. 16.)

♂. Head and thorax scarlet, the thorax with grey streaks on dorsum and above patagia and band on metathorax in front; antennæ bluish grey except towards base; palpi with the 3rd joint grey; tibiæ and tarsi grey, the fringes of hair on former scarlet;

abdomen scarlet with dorsal grey bars on two basal segments and blue-grey lines between the other segments. Fore wing grey-brown; a scarlet streak below costa to beyond middle and fascia at base of inner margin bifurcate at extremity; orange-scarlet spots in end of cell, below base of vein 2, and just beyond the cell above veins 6, 5, 4, and elongate marks in the interspaces of terminal area. Hind wing yellow tinged with scarlet. Underside of fore wing suffused with scarlet except the costa and veins.

Hab. Gold Coast, Aburi (*Armstrong*), 1 ♂ type. *Exp.* 58 millim.

*296 *b*. Balacra germana.

Balacra germana, Roths. Nov. Zool. xix. p. 119, pl. xiv. f. 24 (1912).

♂. Head crimson; antennæ (broken) white at base; tegulæ crimson, grey-white at base; patagia crimson; thorax grey-white with crimson patches on meso- and metathorax; pectus crimson with slight lateral grey-white patches; femora crimson, the tibiæ and tarsi pale grey; abdomen crimson, the 1st two segments grey-white at base, the 4th to terminal segments blue-black at base, the ventral surface crimson, the two basal segments grey-white at base. Fore wing pale grey-brown; a scarlet streak below costa to beyond middle; the basal inner area scarlet; scarlet spots in end of cell and below base of vein 2; the interspaces of terminal half scarlet. Hind wing whitish suffused with scarlet. Underside of fore wing scarlet, the veins and costa pale brownish.

Hab. Sierra Leone, type † ♂ in Coll. Rothschild. *Exp.* 52 millim.

297 *a*. Balacra furva.

Pseudapiconoma rubricincta, Hmpsn. Cat. Lep. Phal. B.M. i. p. 151 (part.).

Balacra furva, Hmpsn. A. M. N. H. (8) viii. p. 394 (1911); Roths. Nov. Zool. xix. pl. xiii. f. 3.

♂. Head and thorax white, the palpi, frons, and edges of tegulæ crimson, the patagia with crimson stripes, the pro-, meso-, and metathorax with paired dorsal bars; antennæ black below; pectus and femora crimson, the tibiæ and tarsi white; abdomen crimson with white and fuscous segmental lines, the anal tuft white at tips, the ventral surface white with crimson bands. Fore wing with the basal half, inner area, and costal area buff, the last extending beyond the cell down to vein 6 and with a white stripe on costa to beyond middle and antemedial spot on vein 1; the rest of wing hyaline with the veins buff; a hyaline spot in end of cell before the buff discoidal patch conjoined to the buff on costal area. Hind wing small with the tornus lobed; crimson, the cilia white.

Hab. Gold Coast (*W. H. Johnston*), 1 ♂ type, Ashanti (*McCarthy*), 1 ♂. *Exp.* 40 millim.

298. **Pseudapiconoma glagoessa**, insert
Balacra pulchra, Auriv. Ent. Tidskr. xiii. p. 200 (1892), which has priority.

299. Balacra elegans.

Roths. Nov. Zool. xix. pl. xiii. ff. 4, 5.

♀. Head and thorax blue-grey tinged with brown, palpi, sides of frons, basal joint of antennæ above, and back of head crimson; pectus except in front, sides of coxæ, femora above and tibiæ on inner side crimson; abdomen blue-grey tinged with brown, the 1st two segments with diffused subdorsal orange bands, slight, connected dorsally on 2nd segment, the next five segments with subdorsal black bands, narrowest at middle, the lateral tufts of hair brown, the ventral surface with crimson subventral patches on 1st six segments and slight marks on anal segment. Fore wing pale red-brown, the inner area and a faint bar across end of cell tinged with blue-grey. Hind wing orange. Underside of fore wing with the basal half of costal area, the cell, and area below it to termen at vein 2 orange, a crimson spot in upper end of cell.

Hab. Uganda, Entebbe (*Minchin*). *Exp.* 62 millim.

Subsp. *curriei*, Dyar, J. N.Y. Ent. Soc. vii. p. 174 (1899).

Underside of thorax entirely crimson; femora and basal half of hind tibiæ crimson above; abdomen bluish grey, with segmental black lines, the basal segment with orange hair and the lateral tufts orange, a dorsal series of crimson points. Fore wing with the hyaline patches between veins 2 and 6 large and diffused nearly to termen.

Hab. Liberia, Mt. Coffee.

Genus PARAMELISA.

Type.
Paramelisa, Auriv. Ark. f. Zool. iii. 1. p. 13 (1905)..... *lophura*.

Proboscis absent; palpi porrect, not reaching beyond the frontal tuft; antennæ of male somewhat laminate and minutely ciliated; tibiæ with minute terminal pairs of spurs; abdomen of male with long spreading tuft of hair from extremity. Fore wing very long and narrow, the termen very obliquely curved, the inner margin short; the tornus with a lobe folded over on underside and forming the retinaculum; vein 2 obsolescent, nearly erect from median nervure to termen near tornus; vein 3 oblique, sinuous; the discocellulars highly angled and the angles of cell produced, vein 5 from just above angle; 6 from upper angle; 7, 8, 9, 10, 11 stalked, 11 from beyond 7. Hind wing aborted, small, triangular, clothed with rough hair, the apical half of costal area folded over and forming a large lobe on underside; vein 2 from middle of cell; 3 from angle; 4 absent; 5 from above angle; the subcostal nervure highly arched, vein 6 oblique, 7 absent.

In key differs from *Eressa* in the abdomen having a large tuft of hair from extremity; fore wing with vein 11 from beyond 7.

*299 *a*. Paramelisa lophura.

Paramelisa lophura, Auriv. Ark. f. Zool. iii. 1. p. 13, pl. i. f. 2 (1905).

♂. Head, tegulæ, and pectus orange-yellow; antennæ with the shaft white above; thorax dark brown; tibiæ brown, their extremities and the tarsi white; abdomen with the 1st two segments dark brown, the 3rd segment yellowish white emitting a dorsal band on 4th segment, the remaining segments black with orange lines at

Fig. 15.—*Paramelisa lophura*, ♂. ½.

middle of segments and yellowish white terminal lines, the anal tuft orange, the ventral surface yellowish white. Fore wing uniform brown. Hind wing orange-yellow, the costal area suffused with brown hair. Underside of fore wing with some orange below base of cell; hind wing orange, the lobe fuscous brown.

Hab. W. Africa, Congo, Mukimbungu, type † ♂ in Mus. Stockholm. *Exp.* 50 millim.

*299 *b*. Paramelisa lophuroides.

Paramelisa lophuroides, Oberth. Ann. Soc. Ent. Fr. lxxix. p. 463, pl. 17. f. 13 (1911).

♂. Head and thorax brown, the vertex of head yellow, the antennæ pale yellow, the tegulæ yellow at tips; tarsi with the 1st joint crimson above, the extremities yellowish white; abdomen brown with some red hair at base, the 3rd segment yellowish white, the following segments with narrow red bands, the anal tuft black-brown. Fore wing uniform brown. Hind wing ochreous yellow.

Hab. Cameroons, Johann Albrecht's Höhe (*Conradt*). *Exp.* 42 millim. This species is unknown to me.

Genus PSEUDMELISA.

	Type.
Pseudmelisa, Hmpsn. P. Z. S. 1910, p. 391	*chalybsa*.

Proboscis absent; palpi small, porrect; antennæ of female laminate; tibiæ with minute terminal pairs of spurs; abdomen very elongate. Fore wing narrow and elongate, the termen very obliquely curved; vein 3 from before

angle of cell ; 4, 5 stalked ; 6 from upper angle ; 7, 8, 9, 10 stalked ; 10 from beyond 7 ; 11 from cell. Hind wing small ; vein 3 from before angle of cell, 4, 5 from angle ; 6, 7 coincident.

In key differs from *Thyrogonia* in the fore wing having veins 4, 5 stalked, 10 from beyond 7 ; hind wing with veins 4, 5 from cell.

299 *c*. **Pseudmelisa chalybsa.**

Pseudmelisa chalybsa, Hmpsn. P. Z. S. 1910, p. 391, pl. xxxvi. f. 5.

♀. Head and thorax black slightly irrorated with metallic blue ; shoulders and pectus at sides with crimson spots ; abdomen black with a slight metallic blue gloss ; a crimson dorsal band at base and

Fig. 16.—*Pseudmelisa chalybsa*, ♀. ½.

lateral patches on the next four segments, a slight yellow dorsal spot on 6th segment, the two terminal segments dorsally yellow, the anal tuft crimson. Fore wing brilliant metallic blue. Hind wing black shot with metallic blue.

Hab. Congo, Kambove Distr. (*Neave*), 1 ♀ type. *Exp.* 46 millim.

300 *a*. **Melisa atavistis.**

Melisa atavistis, Hmpsn. A. M. N. H. (8) viii. p. 395 (1911).

Fore wing of male with veins 2, 3, 4 not bent downwards ; hind

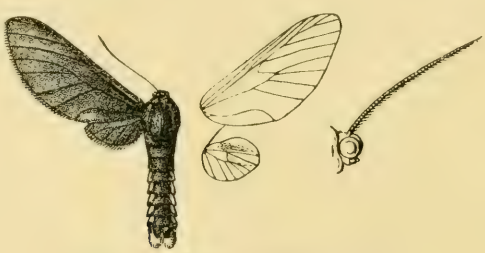

Fig. 17.—*Melissa atavistis*, ♂. ½.

wing rather larger and less distorted, the costal area with fold towards apex only.

♂. Head and thorax black-brown shot with some metallic blue; legs scarlet, the tibiæ with some blue-black at base and orange on inner side, the tarsi orange; abdomen black-brown with silvery-blue segmental lines on terminal segments, subdorsal series of ochreous spots, the anal tuft crimson, the ventral surface with the basal half scarlet, the terminal half ochreous. Fore wing black-brown suffused with metallic blue. Hind wing black-brown. Underside of fore wing with grey-brown streak above vein 5.

Hab. Gold Coast, Bibianaha (*Spurrell*), 3 ♂ type. *Exp.* 48 millim.

*303 *a*. **Pseudosphex novercida.**

Pseudosphex novercida, Kaye, Trans. Ent. Soc. 1913, p. 5, pl. i. ff. 3, 3 *a*.

♂. Head, thorax, and abdomen black-brown with slight greyish pile; coxæ with whitish marks, the femora slightly streaked with whitish; abdomen with the ventral valve edged with white and with narrow white band beyond it. Fore wing hyaline, the veins and margins black; the costal area, cell, and inner area suffused with black-brown. Hind wing hyaline, the veins and margins black; the cell and a streak below terminal part of vein 1 suffused with black.

Hab. S. Brazil, Castro Paraña (*Kaye*), type † ♂ in Coll. Kaye. *Exp.* 28 millim.

304 *a*. **Pseudosphex melanogen.** (Plate IV. fig. 17.)

Pseudosphex melanogen, Dyar, Pr. U.S. Nat. Mus. xxxviii. p. 229 (1910).
Pseudosphex deceptans, Zerny, Iris, xxvi. p. 121 (1912).

♂. Head black, the frons and back of head yellow; antennæ black-brown; palpi yellow and black; thorax black, the tegulæ yellow behind, the patagia with yellow patches and edges; metathorax with yellow patch; legs yellow with some black on coxæ, femora, and tibiæ; abdomen black with orange-yellow patches on the tubercles and narrow segmental bands on 3rd to terminal segments, the ventral valve edged with white behind. Fore wing hyaline, the cell and submedian interspace to end of cell yellowish, the veins and margins narrowly brown; the area beyond the cell suffused with red-brown from costa to vein 5; the inner margin suffused with red-brown. Hind wing hyaline, the veins and margins narrowly brown.

Hab. Mexico, Vera Cruz, Sta. Rosa (*Schaus*), type in U.S. Nat. Mus.; Brazil, Sta. Catherina, Blumenau, type † ♂ *deceptans* in Mus. Vienna. Hab. ign. 2 ♂. *Exp.* 30 millim.

*305 *a*. **Pseudosphex aracia.** (Plate IV. fig. 18.)

Pseudosphex aracia, D. Jones, Trans. Ent. Soc. 1914, ined. pl. i. f. 1.

♂. Head yellow; palpi mostly brown; antennæ and vertex of head black-brown; thorax yellow, the tips of tegulæ, edges of

patagia, a triangular patch on prothorax, streak on mesothorax, and edges of metathorax black; pectus and legs fulvous yellow, the fore coxæ white, the tibiæ and tarsi streaked with black; abdomen with the basal segment yellow with two subdorsal black streaks, the three following segments fulvous, the terminal segments black with a leaden gloss, the ventral valve golden yellow edged with white. Fore wing hyaline, the veins and margins brown, the brown on costa expanding beyond the cell to vein 5; some golden cupreous at end of cell and on inner area. Hind wing hyaline, the veins and margins narrowly brown.

Hab. S. Brazil, São Paulo, Aracatuba (*D. Jones*), type † ♂ in Coll. D. Jones. *Exp.* 28 millim.

*305 *b*. Pseudosphex clagesi.

Pseudosphex klagesi, Roths. Nov. Zool. xviii. p. 24 (1911), & xx. p. 471, pl. xiv. f. 1.

♂. Head black-brown tinged with grey; thorax red-brown, the tegulæ, outer edge of patagia, and metathorax behind clothed with golden pile; legs rufous, the fore and mid tibiæ in front, and the tarsi except at base dark brown; abdomen rufous, the four terminal segments dark brown with some greyish pile; the ventral valve white with some yellow at base and middle and a narrow yellow band beyond it. Fore wing hyaline, the veins brown; the costal half and inner area to beyond middle clothed with red-brown scales; some yellow at base of costa. Hind wing hyaline, the veins and margin brown; the cell and costal area to beyond middle red-brown.

Hab. Venezuela, Caura R., Corosito (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

*305 *c*. Pseudosphex caurensis.

Pseudosphex caurensis, Klages, Pr. U.S. Nat. Mus. xxix. p. 532 (1906).
Pseudosphex steinbachi, Roths. Nov. Zool. xviii. p. 24 (1911), & xx. p. 471, pl. xiv. f. 4.

♂. Head yellow with two blackish marks behind; antennæ fulvous; thorax fulvous with diffused dark streaks on each side of dorsum and a blackish bar on metathorax; a white line behind the eyes; coxæ and the extremities of mid femora whitish, the tibiæ with black rings at extremities; abdomen with the three basal segments fulvous, the terminal segments black-brown with a fulvous band behind 4th segment, the ventral surface fulvous yellow except the terminal segments, the ventral valve edged with white. Fore wing hyaline, the veins and margins fulvous; some yellow at base of costa; the terminal half of costal area broadly fulvous; the inner area fulvous. Hind wing hyaline, the veins and margins fulvous.

Hab. Venezuela, Caura R., La Vuelta (*Klages*), type † ♂ *steinbachi* in Coll. Rothschild, Carosito; Bolivia, Sta. Cruz del Sierra. *Exp.* 34 millim.

*305 *d.* **Pseudosphex aurifera.** (Plate IV. fig. 19.)

Pseudosphex aurifera, Klages, Pr. U.S. Nat. Mus. xxix. p. 531 (1906).

♀. Head dark brown; antennæ fulvous with the dilated part purple; 2nd and 3rd joints of palpi, frons, and gulæ with some grey hair; thorax clothed with golden hair; pectus dark brown; legs fulvous, the fore legs dark; abdomen fulvous brown, the sides and ventral surface of 2nd segment and ventral fringe on 3rd segment silvery. Fore wing hyaline yellow, the veins and margins brown; the costal half to median nervure and vein 5 suffused with brown, less strongly in cell towards base; the inner margin with brown fascia expanding to vein 1 on basal half. Hind wing hyaline yellow, the veins and margins brown; a fulvous costal fascia, the extremity of cell rather thinly clothed with brownish scales.

Hab. Venezuela, Suapure (*Klages*). *Exp.* 30 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

305 *e.* **Pseudosphex polybioides.**

Pseudosphex polybioides, Burm. Descr. Rep. Arg. v. p. 372 (1878); Kaye Trans. Ent. Soc. 1913, pl. i. ff. 6, 6*a*.
Pseudosphex sericea, Schrottky, Iris, xxiv. p. 148 (1910).

Head bluish black with some grey hair; palpi with the 3rd joint pale fulvous; thorax black with some grey hair; legs fulvous, the femora and fore tibiæ marked with black; abdomen black, the 1st two segments fulvous brown and whitish, the 1st segment of ventral surface long. Fore wing semihyaline fulvous, the terminal area dark brown. Hind wing semihyaline fulvous.

Hab. Paraguay, Puerta Bertoni (*Schrottky*), 1 ♀; Argentina, type † ♀ in Mus. Buenos Ayres. *Exp.* 30 millim.

306. **Pseudosphex ichneumonea** del. *P. polybioides.*

*306 *a.* **Pseudosphex garleppi.**

Pseudosphex garleppi, Roths. Nov. Zool. xviii. p. 24 (1911), & xx. p. 471, pl. xiv. f. 2.

♂. Head and thorax dark red-brown; frons suffused with whitish; tegulæ and patagia edged with yellow; antennæ yellowish at tips; a white line behind the eyes; palpi except at tips and pectus black-brown; legs yellow, the fore coxæ white, the femora towards base and the fore tibiæ above black-brown; abdomen black-brown, the 1st and 2nd segments yellow at sides,

the ventral valve yellow edged with white. Fore wing hyaline, the veins and margins rufous, the costal area broadly suffused with rufous from end of cell to apex. Hind wing hyaline, the veins and margins rufous.

Hab. Bolivia, Yungas de Coroico (*Garlepp*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

306 *b*. **Pseudosphex noverca.**

Pseudosphex noverca, Schaus, J. N.Y. Ent. Soc. ix. p. 40 (1901); Kaye, Trans. Ent. Soc. 1913, pl. i. f. 4.
Pseudosphex polybia, Kaye, Entom. xliv. p. 142 (1911).

Head, thorax, and abdomen black with some grey hairs; fore coxæ on inner side, the tarsi and part of mid tibiæ white below; abdomen with the 1st segment whitish at sides and below and the 1st two segments edged with white below; wings hyaline with the veins and margins black. Fore wing clouded with brown except terminal half of area below vein 5; the costal area to median nervure and vein 5 and the inner area to beyond middle clothed with black hair. Hind wing clouded with brown except apical area; the cell and costal area to beyond middle clothed with black hair.

Hab. Brazil, Castro Paraña, type † ♀ in U.S. Nat. Mus.; Fernandes Pinheiro (*D. Jones*), cotype † ♂ *polybia* in Coll. Kaye; Paraguay, Puerta Bertoni (*Bertoni, Schrottky*), 3 ♂, Villa Encarnacion (*Schrottky*), 1 ♂. *Exp.* 28 millim.

*306 *c*. **Pseudosphex exsul.**

Pseudosphex exsul, Roths. Nov. Zool. xviii. p. 24 (1911), & xx. p. 471, pl. xiv. f. 3.

♂. Head and thorax black-brown tinged with grey; antennæ fulvous at tips; palpi white at tips; fore coxæ white; legs fulvous; abdomen with the two basal segments red-brown, the terminal segments black-brown with a slight greyish tinge, the ventral surfaces fulvous with brown bands on the terminal segments, the ventral valve edged with white. Fore wing hyaline, the veins and margins rufous; the costal area broadly suffused with rufous from end of cell to apex; the inner margin suffused with rufous to beyond middle. Hind wing hyaline, the veins and margins rufous.

Hab. ? S. Brazil, type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

*306 *d*. **Pseudosphex jonesi.**

Pseudosphex jonesi, Kaye, Entom. xliv. p. 142 (1911); id. Trans. Ent. Soc. 1913, pl. i. ff. 5, 5 *a*.

♂. Head and thorax black-brown with some grey hair especially on head and tegulæ; frons white at sides; legs streaked with

fulvous yellow, the tarsi fulvous yellow; abdomen dark brown, ventrally banded with yellowish. Fore wing hyaline, the cell tinged with yellowish; slight fulvous yellow streaks on costal and inner areas; the veins brown. Hind wing hyaline; the costal area fulvous yellowish; the veins brown.

Hab. Brazil, Santos, Alto da Serra (*D. Jones*), co-type † ♂ in Coll. Kaye. *Exp.* 24 millim.

*307 *a*. **Pseudosphex rubripalpus.** (Plate IV. fig. 20.)

Pseudosphex rubripalpus, Hmpsn. A. M. N. H. (7) viii. p. 170 (1901).

♂. Head, thorax, and abdomen greenish black; 1st and 2nd joints of palpi and fore coxæ brown-red; tarsi with the basal joint whitish; abdomen with oblique lateral white streaks on 1st segment, which is white below, the ventral valve edged with white. Fore wing black-brown; a short hyaline streak below base of cell; the area below the cell and vein 5 shot with brilliant purple-blue from before middle to termen. Hind wing black-brown with short hyaline streaks below base of cell; the terminal half shot with purple-blue.

Hab. Brazil, Santos, S. Benitos (*Burchall*), type † ♂ in Mus. Oxon. *Exp.* 44 millim.

308. **Sphecosoma angustata**, insert:—

Subsp. *gracilis*, Klages, P. U.S. Nat. Mus. xxix. p. 532 (1906).

The Panama form with the antennæ black with yellow tips is a distinct subspecies, the typical form has the shaft crimson above.

308 *a*. **Sphecosoma metamela.** (Plate IV. fig. 21.)

Sphecosoma metamela, Hmpsn. A. M. N. H. (7) xv. p. 426 (1905).

♂. Head and thorax yellow; antennæ and vertex of head black; tegulæ black at extremity; patagia edged with black; thorax with dorsal black stripe; abdomen fulvous with two fine black streaks on 1st segment and the three terminal segments black. Fore wing yellowish hyaline, the costal half slightly clouded with fulvous, the veins blackish; fine fulvous streaks below costa and above inner margin. Hind wing yellowish hyaline, the veins blackish.

Hab. Paraguay, Sapucay (*Foster*), 1 ♂ type, Puerto Bertoni (*Schrottky*), 1 ♂. *Exp.* 24 millim.

*308 *b*. **Sphecosoma rufipes.**

Sphecosoma rufipes, Roths. Nov. Zool. xviii. p. 25 (1911), & xx. p. 471, pl. xiv. f. 8.

♂. Head and thorax yellow; antennæ black above except towards tips and with a black bar between their bases; palpi white

except at base; tegulæ with black band, the patagia with black streaks and with black streaks above them on dorsum, the metathorax with blackish patch; fore tarsi blackish at extremities; abdomen with the two first segments yellow with brown dorsal fascia on 1st segment and the valves brownish above, the terminal segments black-brown with yellow bands, the ventral surface fulvous yellow. Fore wing hyaline, the veins and margins narrowly black-brown; slight fulvous yellow streaks below costa and above inner margin. Hind wing hyaline, the veins and margins narrowly black-brown.

Hab. Venezuela, Caura R., La Vuelta (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 32 millim.

*308 *c*. Sphecosoma linda. (Plate IV. fig. 22.)

Sphecosoma linda, D. Jones, Trans. Ent. Soc. 1914, ined. pl. i. f. 3.

♂. Head and thorax yellow; antennæ brown with an orange streak on outer edge of shaft and black bar between their bases; tegulæ with black bars, the patagia and prothorax with black streaks; tarsi streaked with black; abdomen with the three basal segments fulvous, the terminal segments black and all with yellow bands, the ventral surface yellow and fulvous. Fore wing hyaline, the veins and margins narrowly black; slight reddish brown streaks below costa and above inner margin. Hind wing hyaline, the veins and margins narrowly black.

Hab. S. Brazil, São Paulo, Aracatuba (*D. Jones*), type † ♂ in Coll. D. Jones. *Exp.* 26 millim.

*308 *d*. Sphecosoma trinitatis.

Sphecosoma trinitatis, Roths. Nov. Zool. xviii. p. 24 (1911), & xx. p. 471, pl. xiv. f. 5.

♂. Head and thorax yellow; antennæ with the branches blackish, a black bar between their bases; tegulæ with black spots, patagia with black streaks and with black streaks above them on dorsum of thorax; abdomen yellow with broad dark brown bands except on two basal segments. Fore wing hyaline, the veins and margins narrowly dark brown; slight fulvous yellow streaks below costa and above inner margin. Hind wing hyaline, the veins and margins narrowly dark brown.

Hab. Trinidad, Caparo (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 28 millim.

*308 *e*. Sphecosoma sparta. (Plate IV. fig. 23.)

Sphecosoma sparta, Druce, A. M. N. H. (7) v. p. 507 (1900).

♂. Head and thorax yellow; palpi white in front, the 1st and 2nd joints marked with black; antennæ brown, the shaft scarlet on outer side; sides of frons, back of head, a band on tegulæ,

stripes on patagia and mesothorax and a patch on metathorax black; legs streaked with black; abdomen with broad dorsal black bands. Wings yellowish hyaline, the veins and margins narrowly brown; fore wing with the costal area yellower.

Hab. Colombia, Cacagualito (*H. H. Smith*), type † ♂ in Coll. Joicey. *Exp.* 24 millim.

*308*f.* **Sphecosoma nigrifer.** (Plate IV. fig. 24.)

Sphecosoma nigrifer, Dyar, Pr. U.S. Nat. Mus. xxxviii. p. 229 (1910).
Sphecosoma perconstrictum, Zerny, Iris, xxvi. p. 121 (1912).

♂. Head and thorax yellow; antennæ, a band between their bases, and the back of head black; palpi white in front; tegulæ and patagia with black patches; legs yellow; abdomen black, the tubercles with dorsal yellow patches, the 2nd segment yellow, the 3rd, 4th, and 5th segments with broad yellow bands. Wings yellow, the veins and margins narrowly black.

Hab. Mexico, Vera Cruz, Sta. Rosa (*Schaus*); Ecuador, Brazil, Sta. Catherina, type † ♂ *perconstrictum* in Mus. Vienna. *Exp.* 26 millim.

*309*a.* **Sphecosoma melapera.** (Plate IV. fig. 25.)

Sphecosoma melapera, Dognin, Ann. Soc. Ent. Belg. liii. p. 213 (1909).

♂. Head yellow, a patch on vertex and the antennæ black; tegulæ yellow, black at base; patagia yellow edged with black; vertex of thorax black with paired yellow spots on pro- and mesothorax; pectus yellow; legs orange, the fore and mid tarsi black above; abdomen orange, yellow at base and below, the 1st segment with black bar followed by a blue-centred bar and black bars on the valves, the 2nd segment with black spots, the others with dorsal black bands expanding into dorsal spots and with some silvery blue on them, the ventral valve tipped with white. Fore wing hyaline, the veins and margins narrowly black; a large black apical patch; a yellow streak below costa to beyond middle and some yellow at base of inner margin. Hind wing hyaline, the veins and margins narrowly black.

Hab. Colombia, type † ♂ in Coll. Dognin. *Exp.* 30 millim.

*310*a.* **Sphecosoma aurantiipes.**

Sphecosoma aurantiipes, Roths. Nov. Zool. xviii. p. 25 (1913), & xx. p. 471, pl. xiv. f. 7.

♂. Head white with blackish bars between antennæ and at back of head; antennæ black, the shaft yellow towards base and before tips; thorax yellow, the tegulæ black behind, the patagia edged with black, the dorsum with black stripe, the metathorax with black line behind; fore and mid tarsi blackish at extremities; abdomen yellow at base, the 2nd and 3rd segments rufous edged

with yellow behind, the terminal segments blackish edged with yellow, the ventral surface yellow. Fore wing hyaline, the veins and margins narrowly black-brown; fulvous yellow streaks below costa and above inner margin. Hind wing hyaline, the veins and margins narrowly black-brown.

Hab. Venezuela, Caura R., Carosito, San Esteban (*Klages*), type † ♂ in Coll. Rothschild; Br. Guiana, Georgetown, 1 ♂; Paraguay, Sapucay; Bolivia, Sta. Cruz de la Sierra, Encorado. *Exp.* 20–28 millim.

310 *b*. **Sphecosoma meridionalis.** (Plate IV. fig. 26.)

Sphecosoma meridionale, Schrottky, Iris, xxiv. p. 148 (1910).

♂. Head and thorax black mixed with yellow; palpi whitish at tips; frons with lateral white lines; antennæ black, yellowish at tips; pectus and legs fulvous yellow slightly mixed with blackish; abdomen black, the basal segments with yellow mixed, the terminal segments with narrow yellowish bands. Fore wing hyaline, the veins and margins narrowly black, slight yellow streaks below costa and on inner margin. Hind wing hyaline, the veins and margins narrowly blackish.

Hab. Paraguay, Puerto Bertoni (*Schrottky*), 1 ♂. *Exp.* 22 millim.

Larva on *Ageratum conisoides*, L.

310 *c*. **Sphecosoma nigriceps.** (Plate IV. fig. 27.)

Sphecosoma nigriceps, Hmpsn. A. M. N. H. (7) xi. p. 340 (1903).

♂. Head and thorax black; palpi with some yellow hair at base and whitish in front; tegulæ with yellow band; patagia with yellow streaks; pectus and legs yellow; abdomen with the 1st segment yellow, blackish at sides, the next three fulvous with yellow segmental lines, the terminal four blackish with yellow segmental lines, the ventral surface yellow; wings hyaline, the veins and margins narrowly brown; both wings with the costa and fore wing with the inner margin yellow; the costal half of fore wing clouded with pale brown.

Hab. Bolivia (*Berg*), 1 ♂ type. *Exp.* 26 millim.

*310 *d*. **Sphecosoma alica.** (Plate IV. fig. 28.)

Sphecosoma alica, D. Jones, Trans. Ent. Soc. 1914, ined. pl. i. f. 4.

♂. Head and thorax black-brown mixed with some leaden grey; frons edged with whitish, the basal joint of antennæ with white points in front; coxæ with yellowish patches, the legs streaked with yellowish; abdomen black-brown with yellow bands on 4th and 5th segments, the ventral surface whitish towards base, then banded with whitish. Fore wing hyaline, the veins and margins

narrowly black-brown; slight rufous streaks below costa and on inner margin. Hind wing hyaline, the veins and margins narrowly black-brown.

Hab. S. Brazil, São Paulo, Aracatuba (*D. Jones*), type † ♂ in Coll. D. Jones. *Exp.* 20 millim.

311. **Sphecosoma similis**, insert (syn.) :—.

Chrysostola cosmosomoides, Roths. Nov. Zool. xviii. p. 157 (1911), & xix. p. 377, pl. v. f. 9.

Venezuela, San Esteban (*Klages*), type † ♂ in Coll. Rothschild.

312 *a*. **Sphecosoma abdominalis**. (Plate IV. fig. 29.)

Sphecosoma abdominalis, Schaus, Pr. U.S. Nat. Mus. xxix. p. 184 (1905).

♂. Head, thorax, and abdomen orange-yellow; antennæ blackish above; vertex of head with fuscous patch, tegulæ black at base; patagia edged with black; pro- and mesothorax with black bands, metathorax with black patch followed by a bar; fore and mid tarsi streaked with black; abdomen with black dorsal patch with some blue on basal segment and bars on the tubercles, the 3rd and 4th segments dorsally fulvous; pectus and ventral surface of abdomen pale yellow; wings hyaline, the veins and margins narrowly fuscous. Fore wing with orange streak below medial part of costa; a fuscous patch at base of inner margin; the terminal band expanding and emitting short streaks in the interspaces towards apex. Hind wing with some orange at base of costa.

Hab. Venezuela, Caura Valley, La Vuelta, 1 ♂. *Exp.* 32 millim. Type † ♂ in U.S. Nat. Mus.

*314 *a*. **Sphecosoma matta**. (Plate IV. fig. 30.)

Sphecosoma matta, D. Jones, Trans. Ent. Soc. 1914, ined. pl. i. f. 2.

♂. Head blackish irrorated with white, the sides of frons white; the back of head yellow, palpi yellow except basal joint; thorax yellow, the tegulæ black at tips, the patagia edged with black, the dorsum of thorax with black fascia; tibiæ and tarsi with some blackish at extremities; abdomen with the two basal segments yellow, the 1st with black bar and three streaks, the 2nd with some fulvous at base, the other segments blackish banded with yellow, the ventral surface yellow. Fore wing hyaline, the veins and margins narrowly black, slight fulvous streaks below the costa and above base of inner margin. Hind wing hyaline, the veins and margins narrowly black.

Hab. S. Brazil, São Paulo, Aracatuba (*D. Jones*), type † ♂ in Coll. D. Jones. *Exp.* 22 millim.

*314 *b*. Sphecosoma mathani.

Sphecosoma mathani, Roths. Nov. Zool. xviii. p. 25 (1911), & xx. p. 471, pl. xiv. f. 9.

♂. Head and thorax yellow; frons white with black spot at middle; a blackish band behind antennæ; tegulæ black behind, the patagia edged with black, the dorsum with black stripe; abdomen fulvous yellow, the 1st segment edged with black and with black dorsal stripe, the valves with black bars, the other segments with black bands, the ventral surface pale yellow. Fore wing hyaline, the veins and margins black; a slight yellow streak below costa; the black on termen expanding somewhat at apex. Hind wing hyaline, the veins and margins narrowly black.

Hab. Brazil, Amazons, Teffé (*M. de Mathan*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

*315 *a*. Sphecosoma semelina. (Plate IV. fig. 31.)

Sphecosoma semelina, D. Jones, Trans. Ent. Soc. 1914, ined. pl. i. f. 5.

♂. Head black, the frons and points behind antennæ white; gulæ and basal joint of palpi yellow; thorax yellow, the edges of tegulæ and patagia and a streak on dorsum blackish; tibiæ and tarsi streaked with black; abdomen yellow irrorated with blackish except towards base and with fine dorsal and lateral black streaks, the extremity blackish, the ventral surface yellow. Fore wing hyaline, the veins and margins black; some orange above base of inner margin; the black on termen expanding on apical area. Hind wing hyaline, the veins and margins black, the base yellow.

Hab. S. Brazil, Santos, Altoda Serra (*D. Jones*), type † ♂ in Coll. D. Jones. *Exp.* 26 millim.

315 *b*. Sphecosoma melissina.

Sphecosoma melissina, Kaye, Trans. Ent. Soc. 1913, p. 6, pl. i. f. 2.

♂. Head black, the frons and two spots on vertex white; palpi yellow with some black above at tips; thorax orange-yellow, the tegulæ and patagia edged with black, a dorsal black streak; pectus and legs yellow, the fore and mid legs slightly streaked with black; abdomen orange-yellow with dorsal black streak and segmental lines except on terminal segments, the medial segments with some greyish, lateral black streaks on three basal segments curved downwards at extremity, the ventral valve yellow. Fore wing hyaline, the veins and margins black, an orange-yellow streak below costa to beyond middle, some orange-yellow on basal inner area, the black on termen expanding on apical area. Hind wing hyaline, the veins and margins black, the cell and base of inner margin orange-yellow.

Hab. Brazil, Santos, Guarujá (*Kaye, D. Jones*), 5 ♂. *Exp.* 24 millim. Type † ♂ in Coll. Kaye.

322 *a*. **Pompiliodes obliqua**, n. sp. (Plate IV. fig. 32.)

♀. Head, thorax, and abdomen dark brown; antennæ white towards tips. Fore wing dark chocolate-brown; an oblique white band beyond the cell between veins 7 and 3 with some red-brown before it. Hind wing dark brown.

Hab. Ecuador, Paramba (*Rosenberg*), 1 ♀ type. *Exp.* 24 millim.

*326 *a*. **Paramya bricenoi.**

Ichoria bricenoi, Roths. Nov. Zool. xviii. p. 36 (1911), & xx. p. 471, pl. xiii. f. 40.

Hind wing with vein 3 from 2 near termen; abdomen of male with ventral valve.

♂. Head, thorax, and abdomen black-brown; tegulæ and pectus in front with crimson spots; abdomen with subdorsal crimson spots on basal segments, the ventral valve with whitish patches at sides. Fore wing hyaline, the veins and margins broadly, black-brown;

Fig. 18.—*Paramya bricenoi*, ♂. ½.

the basal area black-brown with a subbasal crimson point below costa; a large black-brown discoidal patch conjoined to the costal area; the terminal band expanding widely on apical area, and slightly below vein 2. Hind wing hyaline, the veins and margins black-brown, the terminal band expanding towards apex and into a patch at tornus.

Hab. Venezuela, Merida (*Briceno*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

*330 *a*. **Homœocera magnolimbata.** (Plate V. fig. 1.)

Homœocera magnolimbata, Dogn. Hét. Nouv. Am. Sud, ii. p. 3 (1911).

♀. Head and thorax black; tegulæ, shoulders, and metathorax with white spots edged with brilliant metallic blue, the prothorax with brilliant blue patch; palpi with white spots on 1st joint, the 2nd joint with some white in front; pectus with white spots behind; fore coxæ with white patches, the hind coxæ with white spots; legs with some blue, the hind tibiæ with white patches; abdomen black, the basal segment with subdorsal and lateral, the two following segments with dorsal and lateral white spots edged with brilliant metallic blue, the two following segments with slight dorsal blue marks, sublateral series of white spots with blue bars on

their ventral sides. Fore wing hyaline, the veins and margins black; a black discoidal bar conjoined to the costal fascia; the black terminal band expanding at vein 2. Hind wing hyaline, the veins and margins black; the terminal band expanding towards apex and expanding below vein 2 with irregular inner edge; the underside with some blue on base of costa.

Hab. Fr. Guiana, Nouveau Chantier (*Le Moult*), type † ♀ in Coll. Dognin. *Exp.* 48 millim.

*331 *a.* **Homœocera rhodocera.** (Plate V. fig. 2.)

Homœocera rhodocera, Schaus, Trans. Am. Ent. Soc. xxx. p. 135 (1904).

♀. Head, thorax, and abdomen black; antennæ crimson; palpi in front, frons, vertex of head, and metathorax with silvery-blue patches; mid and hind coxæ white, the femora with slight blue streaks, the tarsi crimson except the hind tarsi at base; abdomen with slight orange dorsal band on 1st segment followed by narrow subdorsal and lateral white spots at base of next segment and blue spots at its extremity, by lateral and sublateral white spots on 3rd segment then by subdorsal blue fascia on the others, the ventral surface with slight white patch at base. Fore wing hyaline, the costal half suffused with red-brown; the veins and margins narrowly blackish; the inner margin yellow, expanding to above vein 1 at base. Hind wing hyaline, the veins and margins narrowly black, the marginal line emitting teeth above and below vein 1; the underside with the costal area crimson except costal edge.

Hab. Panama, Chiriqui, type † ♀ in U.S. Nat. Mus. *Exp.* 40 millim.

*334 *a.* **Homœocera duronia.** (Plate V. fig. 3.)

Homœcera duronia, Druce, A. M. N. H. (8) vii. p. 287 (1911).

♂. Head and thorax black-brown; antennæ with the shaft white towards tips; tibiæ except towards base and tarsi pure white, the base of tibiæ suffused with metallic blue; abdomen black suffused with metallic blue, the rough hair on basal segments black-brown, subdorsal orange spots at base, the 4th to 7th segments with orange bands, the 4th segment with sublateral orange spots. Fore wing hyaline, the veins and margins black; the base black suffused with metallic blue, a white point at base and small subbasal spot below costa; a discoidal black spot; the terminal line expanding into a patch below apex and small wedge-shaped mark at vein 2. Hind wing hyaline, the veins and margins black; the inner area clothed with black-brown hair; the cell and basal costal area pure white. Underside of fore wing with the base of inner area pure white; hind wing with the cell and costal area black-brown.

Hab. Colombia, type † ♂ in Coll. Joicey. *Exp.* 40 millim.

*335 *a*. **Homœocera trizona.** (Plate V. fig. 4.)

Homœocera trizona, Dogn. Ann. Soc. Ent. Belg. l. p. 178 (1906).

♀. Head, thorax, and abdomen black; fore coxæ white in front; abdomen with yellow bands on 1st three segments. Fore wing hyaline, the veins and margins black, the fasciæ on costa and inner margin expanding somewhat to base; a narrow discoidal bar. Hind wing hyaline, the veins and margins black; the terminal line expanding into patches below veins 2 and 1.

Hab. Venezuela, Merida, type † ♀ in Coll. Dognin. *Exp.* 42 millim.

*335 *b*. **Homœocera albizonata.** (Plate V. fig. 5.)

Homœocera albizonata, Dogn. Hét. Nouv. Am. Sud, vii. p. 4 (1914).

♂. Head and thorax black, the base of palpi, frons, tegulæ, and shoulders with white points; coxæ white; fore tibiæ with white points, the mid and hind tibiæ with white bands; abdomen black with pure white bands on three basal segments and dorsal point on 4th segment, the ventral valve white. Fore wing hyaline, the veins and margins black; a slight black discoidal lunule conjoined to the costal fascia; the black on termen expanding slightly at vein 2. Hind wing hyaline, the veins and margins black, the black on termen expanding into small patches below veins 2 and 1; the underside with white streak in the cell.

Hab. E. Colombia, Medina (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 48 millim.

336. **Homœocera acuminata,** insert (syns.) :—

Glaucopis leucostalacta, Burm. Descr. Rep. Arg. Atlas, p. 59 (1880).
Læmocharis quinquepunctata, Heyl. C. R. Soc. Ent. Belg. xxxiv. p. xiii (1890); Hmpsn. Cat. Lep. Phal. B.M. i. p. 234.

338. **Neotrichura penates,** insert:—

Læmocharis nigripes, Heyl. C. R. Soc. Ent. Belg. xxxiv. p. xiv (1890),

which has precedence.

*339 *a*. **Isanthrene monticola.** (Plate V. fig. 6.)

Isanthrene monticola, Schaus, A. M. N. H. (8) vii. p. 173 (1911).

♂. Head, thorax, and abdomen orange-red; palpi black at tips; antennæ black, white towards tips; tegulæ and patagia with lateral black spots; pro- and mesothorax with paired black spots, the metathorax with one spot; abdomen with dorsal, lateral, and sub-lateral series of black points. Fore wing hyaline, the margins orange-red, the veins blackish tinged with orange; a black point at

base of costa and subbasal streak on costa; the orange on termen expanding widely on apical area and slightly below vein 2, defined on inner side by black. Hind wing hyaline, the base, costa, and termen from apex to vein 4 orange-red, the veins and inner margin black, the orange on apical area defined on inner side by black; cilia orange.

Hab. Costa Rica, Sitio (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 38 millim.

*339 *b*. **Isanthrene schausi.** (Plate V. fig. 7.)

Isanthrene schausi, Roths. Nov. Zool. xviii. p. 25 (1911), & xx. p. 471, pl. xiv. f. 10.

♀. Head, thorax, and abdomen orange; palpi and frons yellow; antennæ black; back of head with slight black mark; tegulæ black in front; pro- and mesothorax with paired black points; coxæ yellow; abdomen with black bars on the lateral valves and dorsal black points on the three basal segments. Fore wing hyaline, the veins and margins black; the base of costal and inner areas orange with a white point at base of costa; an orange streak below costa; a black apical patch. Hind wing hyaline, the veins and margins narrowly black; the black on termen expanding slightly at apex; the underside with the cell and basal costal area orange.

Hab. Mexico, Vera Cruz, Huatuxco, type † ♀ in Coll. Rothschild. *Exp.* 32 millim.

*341 *a*. **Isanthrene tryhanei.**

Isanthrene tryhanei, Roths. Nov. Zool. xviii. p. 26 (1911), & xx. p. 471, pl. xiv. f. 24.

♀. Head, thorax, and abdomen black shot with metallic blue; antennæ orange-red, the basal half of shaft black above; frons yellow at sides and below, and with yellow spot above; some yellow behind the eyes; pectus with lateral spots; fore tibiæ and base of tarsi crimson, the mid and hind femora towards extremities, the mid tibiæ and extremities of hind tibiæ crimson; abdomen with subdorsal yellow stripes on 1st segment and subdorsal bars on 2nd segment, lateral white spots on two basal segments, and ventral white bars on three medial segments. Fore wing hyaline, the veins and margins black-brown; the basal half of inner area black-brown; the terminal band expanding widely on apical area and dentate at vein 2. Hind wing hyaline, the veins, margins, and inner area black-brown; the underside with yellow streak on basal half of vein 1.

Hab. Trinidad, St. Anne's (*Tryhane*), type † ♀ in Coll. Rothschild. *Exp.* 52 millim.

*343 *a*. Isanthrene drucei.

Isanthrene drucei, Roths. Nov. Zool. xviii. p. 26 (1911), & xx. p. 471, pl. xiv. f. 11.

♂. Head yellow; palpi with a black streak at sides towards tips; back of head black; antennæ fulvous red, the basal half of shaft black; thorax black-brown with yellow patches on tegulæ and stripes on patagia and dorsum; pectus and legs black-brown and yellow, the coxæ white, the tibiæ and base of fore tarsi fiery-red; abdomen black-brown, a bifurcate yellow and white patch at base of dorsum, the three medial segments with subdorsal yellow spots, lateral yellow spots on 2nd to 5th segments, the ventral surface with white bars on three medial segments. Fore wing hyaline with a fulvous yellow tinge, the veins and margins black; some yellow at base; the black on termen expanding widely on apical area. Hind wing hyaline, the veins, margins, and inner area black; some yellow at base and on inner margin; the underside with the costal area yellow to beyond middle.

Hab. Colombia, type † ♂ in Coll. Rothschild. *Exp.* 42 millim.

*345 *a*. Isanthrene cajetani.

Isanthrene cajetani, Roths. Nov. Zool. xviii. p. 26 (1911), & xx. p. 471, pl. xiv. f. 23.

♂. Head and thorax yellow; antennæ orange-red, yellow at tips; palpi, sides of frons, and basal joint of antennæ black; vertex of head, tegulæ, and patagia edged with black; pectus black and yellow; legs black, the coxæ white; abdomen yellow with black bands expanding into small dorsal spots, the ventral surface black with white bars except on terminal segments. Fore wing hyaline, the veins and margins black-brown; some yellow at base; a yellow streak below costa and streaks above and below basal part of vein 1; the black on termen expanding widely on apical area and slightly below vein 2. Hind wing hyaline, the veins, margins, and inner area black-brown; some yellow at base; the black on termen expanding slightly towards apex.

Hab. Centr. America, type † ♂ in Coll. Rothschild. *Exp.* 54 millim.

*346 *a*. Isanthrene columbiana.

Isanthrene columbiana, Roths. Nov. Zool. xviii. p. 26 (1911), & xx. p. 471, pl. xiv. f. 25.

♀. Head and thorax black-brown; antennæ orange-red, the basal half of shaft black above; pectus with lateral yellow spots; abdomen black-brown shot with metallic blue, the basal segment with bifurcate yellow dorsal patch and some yellow at sides, the 2nd segment with conjoined subdorsal and lateral spots, the 3rd segment with small subventral white spots. Fore wing hyaline, the veins and margins black; a golden-yellow streak below costa to

beyond middle and streaks above and below basal half of vein 1; the black on termen expanding widely on apical area, and dentate at vein 2. Hind wing hyaline, the veins, margins, and inner area black; some yellowish at base; the black on termen expanding slightly towards apex; the underside with the cell and costal area to beyond middle orange-yellow, the inner area orange-yellow with slight blackish streaks.

Hab. COLOMBIA, Bogotá, type † ♀ in Coll. Rothschild. *Exp.* 54 millim.

349 *a*. Isanthrene joda. (Plate V. fig. 8.)

Isanthrene joda, Druce, A. M. N. H. (7) xi. p. 196 (1903).

Head, thorax, and abdomen black; vertex of head, tegulæ, meso- and metathorax, and legs with patches of metallic blue; pectus and coxæ with some yellowish hair; abdomen with yellow dorsal segmental lines on 1st four segments, subdorsal and sublateral series of blue spots, the ventral valve white. Fore wing yellow-hyaline, the veins rufous with some black scales; some black at base with a blue spot on it; a rufous streak above base of inner margin; the inner margin and termen narrowly black; a black apical patch. Hind wing yellowish hyaline, the veins rufous with some black scales; the termen narrowly black, expanding into dentate marks above and below vein 1; the lower part of cell rather long.

Hab. PERU, Marcapoleuzco, type † in Coll. Joicey, Chanchamayo, 4 ♂, 1 ♀. *Exp.* 46 millim.

*352 *a*. Isanthrene atrizonata. (Plate V. fig. 9.)

Isanthrene atrizonata, Dogn. Hét. Nouv. Am. Sud, v. p. 3 (1912).

♀. Head and thorax black-brown; frons yellow; basal joint of antennæ yellow in front; tegulæ yellow except at tips; patagia with yellow streaks; extremities of tibiæ and the tarsi yellow, the extremities of femora and base of tibiæ with some metallic blue; abdomen black with yellow bands on each segment, the terminal segments with subdorsal metallic-blue spots, the ventral surface with yellow bands on two medial segments with sublateral metallic blue spots beyond them. Fore wing yellowish hyaline, the veins and margins black-brown; a slight blue spot below base of costa and yellow streak above base of inner margin; the black-brown terminal band expanding slightly at apex and vein 2. Hind wing hyaline, the veins and margins black-brown, the termen with dentate black marks below veins 2 and 1; the underside with some yellow below basal half of costa.

Hab. COLOMBIA, Medina (*Fassl*), type † ♀ in Coll. Dognin. *Exp.* 38 millim.

354 *a*. **Isanthrene fulvipuncta.** (Plate V. fig. 10.)

Isanthrene varia, Hmpsn. Cat. Lep. Phal. i. p. 176 (part.).
Isanthrene fulvipuncta, Hmpsn. A. M. N. H. (7) xv. p. 427 (1905).

♀. Head, thorax, and abdomen black-brown; antennæ fulvous, the shaft ringed with black and the branches partly black; frons, vertex of head, and tegulæ with silvery-blue patches; patagia with obscure fulvous streaks; fore coxæ with blue patches, hind coxæ with orange spots, the base of femora with streak above, the tarsi and extremity of hind tibiæ orange; abdomen with two orange dorsal points on 1st segment followed by paired fulvous spots on the next two segments, subdorsal white points and yellow lateral spots on 2nd segment, the other segments with leaden subdorsal fasciæ with blue spots on them, the ventral surface with white band at base followed by sublateral white spots on next segment and blue spots on 3rd segment. Fore wing hyaline, the costal half tinged with yellow; the veins brown and fulvous; two silvery-blue points at base; a fulvous streak, subcostal towards base, then becoming costal; the inner area dark with fulvous streaks above and below vein 1 on basal half; a terminal dark band with slightly irregular inner edge, expanding somewhat towards apex and angled inwards at vein 2. Hind wing hyaline, the veins dark, a narrow terminal band slightly incurved at veins 2 and 1; the underside with the cell and costal area, except costal edges, fulvous.

Hab. Panama, Chiriqui (*Champion*), 1 ♀ type, Godman-Salvin Coll. *Exp.* 42 millim.

355 *a*. **Isanthrene meridensis.** (Plate V. fig. 11.)

Sarosa meridensis, Schaus, Trans. Am. Ent. Soc. xxx. p. 135 (1904).

Head, thorax, and abdomen black; back of head and metathorax with brilliant blue spots; fore coxæ with bluish-white patches; tarsi orange; abdomen with dorsal yellow bands on 1st two segments followed by subdorsal whitish spots on next two segments, then blue spots, the ventral surface with the 1st segment edged with white, then sublateral white spots on next two segments. Fore wing yellowish hyaline, the veins black; two blue points at base; a subcostal orange streak to near apex, orange streaks on basal half above and below vein 1; the inner margin black; a narrow terminal band expanding into a large patch from apex to vein 4 and a dentate mark at vein 2. Hind wing hyaline; the costa orange, the veins and a narrow slightly irregular terminal band black.

Hab. Venezuela, Merida, type † in U.S. Nat. Mus., Mocotone, 1 ♂. *Exp.* 42 millim.

*360 *a*. **Isanthrene crabronides.** (Plate V. fig. 12.)

Isanthrene crabronides, Dogn. Hét. Nouv. Am. Sud, v. p. 3 (1912).

♂. Head and thorax black-brown; palpi fulvous; frons yellow;

antennæ with the branches fulvous; tegulæ yellow at base and tips; patagia with yellow streak; dorsum of thorax with slight yellow streak and a spot on metathorax; pectus yellow; legs orange, the mid and hind tibiæ above and the tarsi at extremities black; abdomen fulvous yellow, the three basal segments with black bands and pale yellow at base, the terminal segments with slight subdorsal opalescent and blackish marks, the ventral surface with the extremity of the valve and the area just beyond it pale yellow. Fore wing hyaline, the costal half tinged with yellow; the veins and margins narrowly black; a fulvous yellow streak above basal half of inner margin. Hind wing hyaline, the veins and margins black; the basal half of costa and base of inner margin with some fulvous yellow; a lunulate black patch on termen below vein 2.

♀. Ventral surface of abdomen with narrow black band on 2nd segment.

Hab. Colombia, Medina (*Fassl*), type † ♂, ♀ in Coll. Dognin. *Exp.*, ♂ 36, ♀ 44 millim.

*360 *b*. **Isanthrene dorsimacula.** (Plate V. fig. 13.)

Isanthrene dorsimacula, Dogn. Hét. Nouv. Am. Sud, v. p. 4 (1912).

♂. Head pale yellow; palpi with black spot on 1st joint; antennæ blackish; thorax black-brown, the tegulæ and streaks on patagia yellow; pectus with some blue at sides; legs yellow with some brown on hind tibiæ above; abdomen with the three basal segments black with dorsal orange-yellow spot on 2nd segment with subdorsal blue spots beyond it, the terminal segments orange-yellow with narrow black segmental bands, the ventral surface orange-yellow with the valve pale yellow. Fore wing yellowish hyaline, the veins and margins narrowly black-brown; a slight yellow streak above base of inner margin. Hind wing hyaline, the veins and margins black; the basal half of costal area black; the termen with wedge-shaped black patch at vein 1; the underside with yellow fascia below basal half of costa.

Hab. Colombia, Medina (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 30 millim.

P. 179. For *Bombiliodes* read **Autochloris**, Hübn. Verz. p. 125 (1827), which has precedence. Type *almon*.

*368 *a*. **Autochloris cincta.** (Plate V. fig. 14.)

Bombiliodes cincta, Schaus, Pr. U.S. Nat. Mus. xxix. p. 184 (1905).

♀. Head and thorax black-brown; frons with white lateral lines; vertex of head and tegulæ with bluish patches; prothorax and shoulders with white points; coxæ, meso- and metathorax at sides with white spots; abdomen black, the 1st segment yellowish white above interrupted at middle, dorsal and lateral metallic green

spots, the terminal three segments above and four below orange-red; ventral valve edged with white and followed by a white band. Fore wing yellowish hyaline, the veins and margins broadly black; a large black discoidal lunule; a slight hyaline streak above vein 1 beyond middle; the terminal band expanding widely towards apex. Hind wing hyaline, the veins and margins black, the terminal band expanding towards apex and tornus.

Hab. Fr. Guiana, St. Jean Maroni, type † ♀ in U.S. Nat. Mus. *Exp.* 40 millim.

*369 *a*. **Autochloris mathani.**

Autochloris mathani, Roths. Nov. Zool. xviii. p. 27 (1911), & xx. p. 471, pl. xiv. f. 9.

♀. Head and thorax black-brown, the vertex of head and tegulæ with metallic blue patches; some whitish on shoulders and prothorax; pectus with lateral white patches; coxæ white; abdomen black with yellowish dorsal band on basal segment and metallic blue bands on four medial segments, the extremity orange-red. Fore wing hyaline, the veins and margins black-brown; a slight yellow streak below costa to beyond middle and some yellow above base of vein 1; a black discoidal bar; the black on termen expanding widely on apical area, and slightly at vein 2. Hind wing hyaline, the veins, margins, and inner area black-brown; the terminal band expanding somewhat towards apex; the underside with the cell and costal area orange-yellow to beyond middle.

Hab. Colombia, Cundinamarcha, Cananche (*M. de Mathan*), type † ♀ in Coll. Rothschild. *Exp.* 42 millim.

371 *a*. **Autochloris xanthogastroides.** (Plate V. fig. 15.)

Bombiliodes xanthogastroides, Schaus, J. N.Y. Ent. Soc. ix. p. 40 (1901).

♀. Head and thorax black; antennæ white at tips; back of head and tegulæ metallic blue; abdomen with the 1st three segments above and the 1st four segments below black, the 2nd and 3rd with lateral metallic blue patches and the 3rd with a few dorsal orange-red scales, the rest of abdomen orange-red. Fore wing brownish hyaline, the veins and margins black. Hind wing hyaline, the veins and margins black, the terminal band expanding irregularly between vein 2 and tornus.

Hab. Brazil, Castro Paraña (*D. Jones*), 1 ♀. *Exp.* 46 millim. Type † ♀ in U.S. Nat. Mus.

*374 *a*. **Autochloris simulans.** (Plate V. fig. 16.)

Bombiliodes simulans, Druce, A. M. N. H. (8) iii. p. 457 (1909).

♀. Head and thorax black, the vertex of head metallic blue; shoulders, pectus at sides, and coxæ with white patches; abdomen

black with dorsal and lateral golden green stripes, a dorsal white band at base. Fore wing black with hyaline streaks below costa and cell near base and two streaks in cell not extending to its extremity. Hind wing black with hyaline streaks in lower part of cell and below the cell.

Hab. Fr. Guiana, Cayenne, type † ♀ in Coll. Joicey. *Exp.* 40 millim.

*374 *b*. **Autochloris trinitatis.** (Plate V. fig. 17.)

Autochloris trinitatis, Roths. Nov. Zool. xix. p. 154 (1912).

♀. Head and thorax dark brown, the frons, vertex of head, shoulders, and metathorax metallic green; pectus with some green at sides; abdomen dark brown with metallic green dorsal and lateral stripes, the ventral surface slightly suffused with green and with the basal segment white. Fore wing dark red-brown with a metallic green point at base. Hind wing dark red-brown.

Hab. Trinidad, Caparo (*Klages*), type † ♀ in Coll. Rothschild. *Exp.* 34 millim.

376 *a*. **Autochloris almon.**

Phalæna almon, Cram. Pap. Exot. iii. p. 52, pl. 224. f. F (1779); Stoll, Suppl. Cram. Pap. Exot. p. 50, pl. 11. ff. 1, A, D.

♀. Head and thorax black-brown; frons white at sides; tegulæ with metallic green spots; shoulders, pectus at sides, and coxæ with white spots; abdomen black-brown with dorsal and subdorsal metallic green stripes and sublateral series of white spots except at base and extremity. Fore wing hyaline, the veins and margins broadly black-brown; a black-brown discoidal lunule conjoined to the costal fascia; the terminal band expanding towards costa and angled inwards at vein 2. Hind wing hyaline with the veins and margins black-brown, the terminal band expanding towards costa and below vein 2, where it narrows to a point on inner margin near base.

Hab. Br. Guiana, Berbice, 2 ♀; Surinam. *Exp.* 42 millim.

376 *b*. **Autochloris vitistriga**, Druce, trans. from *Saurita*, no. 618.

Genus **SAROSA**.

Sect. I. is better defined by the termen of hind wing being excised towards tornus.

S. acutior and *S. pompilina* will belong to this section.

378. **Sarosa sesiiformis**, insert (syn.):—

Sarosa xanthotarsis, Lathy, Entom. xxxii. p. 116 (1899).

*378 *a*. Sarosa flavicostalis.

Cosmosoma flavicostale, Roths. Nov. Zool. xviii. p. 33 (1911), & xx. p. 472, pl. xiv. f. 42.

♂. Head and thorax black-brown; lower part of frons and basal joint of antennæ in front white; patagia and dorsum of thorax with pale yellowish streaks; pectus with yellow patches; coxæ white; tarsi streaked with yellow; abdomen black suffused with metallic blue except at base, the two basal segments with yellowish white bands, the 3rd to 5th with narrow yellow bands, the ventral valve with white band at extremity and the two following segments with white bands. Fore wing hyaline, the veins and margins narrowly black-brown; two white points at base; orange-red fasciæ below costa and above inner margin except towards termen; the terminal band expanding somewhat towards apex. Hind wing hyaline, the veins and margins black-brown; the terminal band expanding rather irregularly below vein 2; the underside with orange-red fascia below costa.

Hab. Peru, Carabaya, R. Huacamayo (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 36 millim.

*378 *b*. Sarosa epona. (Plate V. fig. 18.)

Sarosa epona, Dogn. Ann. Soc. Ent. Belg. xlvi. p. 226 (1902).

♂. Head and thorax yellow; antennæ and patches on tegulæ and patagia and a streak on thorax black, the tegulæ with blue spots; pectus with blue spots; legs streaked with black and marked with metallic blue; abdomen yellow banded with black and with subdorsal and lateral series of blue spots. Fore wing hyaline yellow, the veins and margins black; some metallic blue at base and yellow streaks above and below base of vein 1; the terminal band expanding widely on apical area and slightly at vein 2. Hind wing hyaline yellow, the veins and margins black, the terminal band expanding irregularly towards tornus.

Hab. Venezuela, type † ♂ in Coll. Dognin. *Exp.* 36 millim.

*378 *c*. Sarosa atritorna. (Plate V. fig. 19.)

Sarosa atritorna, Dogn. Hét. Nouv. Am. Sud, v. p. 4 (1912).

♂. Head and thorax fulvous yellow mixed with black-brown, the vertex of head with some silvery blue; antennæ black-brown, the shaft yellow above towards tips; abdomen fulvous yellow with black bands on which are metallic blue subdorsal spots, except on terminal segments which have black subdorsal spots, the ventral surface yellow with black bands on three medial segments, the terminal segments fulvous yellow with small ventral black spots. Fore wing yellowish hyaline, the veins and margins black-brown; a yellow streak below costa to beyond middle, some yellow above base of vein 1, and a yellow streak above basal half of inner margin; the

terminal band expanding towards apex and with waved inner edge. Hind wing hyaline, the veins and margins black; the terminal band expanding into dentate marks above and below vein 1; the underside with yellow fascia below costa to beyond middle.

Hab. Colombia, Medina (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 34 millim.

378 *d*. Sarosa lutibasis. (Plate V. fig. 20.)

Sarosa lutibasis, Hmpsn. A. M. N. H. (7) viii. p. 171 (1901).

♂. Head, thorax, and abdomen deep black; frons, vertex of head, tegulæ, pectus behind, femora, and tibiæ with brilliant blue spots; hind coxæ yellowish white; abdomen with yellowish white basal patch on 1st segment followed by a slender segmental line; a subdorsal series of brilliant blue spots; sublateral yellowish spots on 2nd segment followed by two blue spots; wings yellowish hyaline, the veins and margins rather broadly black. Fore wing with brilliant blue spot at base; an orange streak below costa extending to near apex; a short orange streak above vein 1 and one below it extending to middle; the terminal band expanding widely on apical area and dentate on vein 2. Hind wing with the terminal band expanding into a large patch with dentate inner edge at tornus.

Hab. Panama, La Chorrera (*Dolby-Tyler*), 1 ♂ type. *Exp.* 36 millim.

*378 *e*. Sarosa clagesi.

Sarosa klagesi, Roths. Nov. Zool. xviii. p. 27 (1911), & xx. p. 471, pl. xiv. f. 13.

♀. Head, thorax, and abdomen black-brown; frons yellow at sides; yellow spots behind the eyes, on shoulders and tegulæ; vertex of head and metathorax with some metallic blue; pectus and legs with some metallic blue, the hind coxæ yellowish white, the tibiæ yellow; abdomen with yellow bands on three basal segments, the following segments with subdorsal and sublateral metallic blue patches. Fore wing hyaline, the veins and margins black-brown; a metallic blue spot at base of costa; traces of a yellow streak above inner margin; the black on termen expanding towards apex. Hind wing hyaline, the veins and margins black; the black on termen expanding into dentate marks above and below vein 1; the underside with yellow streak in upper part of cell.

Hab. Venezuela, San Esteban (*Klages*), type † ♀ in Coll. Rothschild. *Exp.* 40 millim.

*378 *f*. Sarosa bœnninghauseni.

Sarosa bœnninghauseni, Roths. Nov. Zool. xviii. p. 27 (1911), & xx. p. 471, pl. xiv. f. 12.

♂. Head and thorax dark brown; palpi yellow in front; antennæ fulvous yellow, the shaft black above towards base; tegulæ yellow in front, the patagia with some yellow on outer edge; tarsi orange-

yellow with slight brown streaks on outer edge of 1st joint; abdomen dark brown with yellowish white dorsal bands on three basal segments, the terminal segments with some silvery blue at sides, the ventral surface with white band on 3rd segment and narrow yellowish band on 4th segment with some silvery blue before and beyond it. Fore wing hyaline, the veins and margins brown; orange-red fasciæ below costa and above inner margin; some orange-red above base of vein 1 with a brown spot at its extremity. Hind wing hyaline, the veins and margins brown, the terminal band expanding into confluent dentate patches above and below vein 1. Underside of both wings with the costal area orange-red; hind wing with a brown streak in lower part of cell.

Hab. S. Brazil, type † ♂ in Coll. Rothschild. *Exp.* 32 millim.

378 *g*. **Sarosa mora.** (Plate V. fig. 21.)

Sarosa mora, Schaus, A. M. N. H. (8) vii. p. 173 (1911).

♂. Head and thorax black-brown; palpi with some metallic blue in front; vertex of head and tegulæ with metallic blue spots; pectus with blue spots; tibiæ slightly streaked with blue, the hind coxæ white, the tarsi yellow towards extremities; abdomen black-brown with white dorsal band at base and lateral and sublateral spots on 2nd segment, the 2nd and 3rd segments with subdorsal blue spots. Fore wing hyaline, the veins and margins black; an orange streak below costa and streaks above and below basal half of vein 1; a metallic blue spot below base of costa; the interspaces of terminal area with black streaks, the streak in discal fold extending just into the cell. Hind wing hyaline, the veins and margins black, the terminal black band expanding widely below vein 2 with irregular inner edge; the underside with orange streak below costa extending into upper part of cell.

Hab. Costa Rica, Sitio (*Schaus*), 1 ♂. *Exp.* 36 millim.

*379 *a*. **Sarosa helotes.** (Plate V. fig. 22.)

Sarrosa helotes, Druce, A. M. N. H. (7) v. p. 507 (1900).

♂. Head black, the frons and vertex with brilliant blue patches, the lower part of frons white; thorax orange, the tegulæ with black and blue patches, the patagia black on outer side; metathorax with black patch; legs black except towards base, the hind tarsi orange except the 1st joint below; abdomen orange with dorsal and lateral series of black and blue spots; the extremity and ventral surface black, the valve entirely pure white. Wings hyaline, the veins and margins black; small orange patches at base; fore wing with black discoidal lunule conjoined to the black costal area; the terminal band expanding widely on apical area and angled inwards at vein 2; hind wing with the terminal band expanding at apex and tornus.

Hab. Colombia, Valparaiso, 4500 ft. (*H. H. Smith*), type † ♂ in Coll. Joicey. *Exp.* 50 millim.

379 *b*. **Sarosa connotata.** (Plate V. fig. 23.)

Sarosa connotata, Hmpsn. A. M. N. H. (7) viii. p. 171 (1901).

♀. Head black, the frons and vertex with brilliant blue patches, base of frons and tips of antennæ white; thorax orange, the tegulæ black with blue patches; outer side of patagia and mesothorax striped with black, metathorax with black patch; fore legs black, the tarsi orange below; mid legs black, the femora above and tarsi below orange; hind legs orange, the femora striped below with black; abdomen black with dorsal and lateral series of blue spots, the base orange, 2nd to 5th segments with subdorsal orange spots and the 3rd and 4th with lateral spots. Wings hyaline, the veins and margins black, some orange on black patches at base; fore wing with black discoidal lunule conjoined to the black costal area; the terminal band expanding very widely on apical area and angled inwards at vein 2; hind wing with the terminal band expanding at apex and tornus.

Hab. Peru, R. Linimbare, St. Domingo, 4200 ft. (*Simons*), 1 ♀ type. *Exp.* 56 millim.

*380 *a*. **Sarosa annotata.** (Plate V. fig. 24.)

Sarosa annotata, Dogn. Hét. Nouv. Am. Sud, vii. p. 4 (1914).

♂. Head, tegulæ, and patagia black-brown, the frons and vertex of head with some metallic blue; dorsum of thorax yellow; pectus and base of femora yellow, the rest of legs brown; abdomen with the four basal segments yellow, the terminal segments black-brown with metallic blue patches; the ventral surface black-brown with white patches at sides of ventral valve. Fore wing hyaline, the veins and margins black-brown; a black-brown discoidal lunule conjoined to the costal fascia; the terminal band expanding widely towards apex and slightly below vein 2. Hind wing hyaline, the veins and margins black-brown, the terminal band expanding somewhat towards apex.

Hab. Colombia, Popayan, type† ♂ in Coll. Dognin. *Exp.* 42 millim.

*385 *a*. **Dasysphinx pilosa.**

Gymnelia pilosa, Roths. A. M. N. H. (8) v. p. 511 (1910), & Nov. Zool. xx. p. 471, pl. xiv. f. 27.
Homœocera watkinsi, Druce, A. M. N. H. (8) viii. p. 716 (1911).

Head and thorax black, the tegulæ pure white, the 1st joint of palpi with white spot; coxæ and the extremities of mid and hind femora white; abdomen black suffused with metallic blue, the 1st segment with dorsal yellow and white band, the 3rd to 6th segments with subdorsal yellow patches, the 3rd and 4th segments with fiery orange lateral spots, the ventral surface with white patch on first three segments and band on 4th segment. Fore wing hyaline, the veins and margins black; the base black with a white point at base

of vein 1 ; a large black discoidal spot conjoined to the costa ; the black on termen expanding into a lunulate patch from apex to below vein 5 slightly irrorated with whitish, and into a small dentate mark at vein 2. Hind wing hyaline, the inner area white with some blackish at base below the cell ; an elliptical black discoidal spot conjoined to the black costa ; the veins beyond the cell black ; the black on termen expanding into rather triangular marks towards apex and below vein 2.

Hab. Peru, Marcapata (*Ockenden*), type † ♀ in Coll. Rothschild, Uruhuasi (*Watkins*), type † ♂ *watkinsi* in Coll. Druce. *Exp.* 44 millim.

385 *b*. **Dasysphinx leuce**, Mssn., trans. from *Sarosa*, no. 384.

*385 *c*. **Dasysphinx semicincta.** (Plate V. fig. 25.)

Dasysphinx semicincta, Dogn. Hét. Nouv. Am. Sud, vii. p. 4 (1914).

♂. Head and thorax black ; antennæ with some white above towards tips ; fore and mid tibiæ at tips, the greater part of hind tibiæ and the tarsi above white ; abdomen black tinged with metallic blue, the 1st segment with subdorsal orange spots and the 4th, 5th, and 6th with subdorsal bands. Fore wing hyaline with the veins and margins black, the base black tinged with blue with obliquely incurved outer edge ; a black discoidal lunule conjoined to the black on costa. Hind wing hyaline, the veins, margins, and inner area black ; some white at base of costa.

Hab. Colombia, E. Cordoba, Pacho (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 40 millim.

385 *d*. **Dasysphinx buccleyi**, Druce, trans. from *Gymnelia*, no. 394.

*385 *e*. **Dasysphinx baroni.**

Gymnelia baroni, Roths. A. M. N. H. (8) v. p. 510 (1910), & Nov. Zool. xx. p. 471, pl. xiv. f. 28.

♂. Head, thorax, and abdomen black-brown with a faint bluish gloss ; tegulæ with orange spots at sides ; extremities of femora and tibiæ, the spurs, and base of tarsi white ; abdomen with subdorsal orange spots on basal 4th, 5th, and 6th segments. Fore wing yellowish hyaline, the veins and margins rather broadly black-brown with a bluish gloss ; the basal area black-brown with two yellowish white points at base and a subbasal orange spot in cell ; a black discoidal spot conjoined to the costal area ; the terminal band expanding widely from apex to vein 5 and dentate at vein 2. Hind wing yellowish hyaline, the veins, margins, and inner area black-brown with a bluish gloss ; the terminal band expanding somewhat towards apex.

Hab. Ecuador, Zamora (*Baron*), type † ♂ in Coll. Rothschild. *Exp.* 44 millim.

385 *f*. **Dasysphinx ozora**, Druce, trans. from *Sarosa*, no. 382.

*385 *g*. **Dasysphinx volatilis.** (Plate V. fig. 26.)

Dasysphinx volatilis, Schaus, A. M. N. H. (8) vi. p. 189 (1910).

♂. Head, thorax, and abdomen black; tegulæ with white patches; femero-tibial joints and 1st joint of tarsi white; abdomen dorsally tinged with blue, subdorsal and sublateral series of small white spots except on basal segments. Fore wing hyaline, the veins and margins black, the hyaline area from near base to middle suffused with orange-red; a white point in base of cell; a black discoidal lunule. Hind wing hyaline, the veins and margins black, the veins tinged with orange; a black discoidal point. Underside of fore wing with some white at base and on inner area to near tornus; hind wing with the costa white towards base, then black, the upper part of cell orange.

Hab. Costa Rica, Mt. Poas (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 44 millim.

*385 *h*. **Dasysphinx occendeni.**

Gymnelia ockendeni, Roths. A. M. N. H. (8) v. p. 510 (1910), & Nov. Zool. xx. p. 471, pl. xiv. f. 16.

♀. Head and thorax black-brown; legs slightly glossed with blue, the fore coxæ and femora bright crimson on outer side; abdomen black-brown slightly glossed with blue, the 2nd and 3rd segments with small subdorsal crimson spots, sublateral white patches on 3rd and 4th segments, the ventral surface with the extremity bright crimson. Fore wing hyaline, the veins and margins black-brown; the basal area black-brown; a black discoidal bar; the terminal band expanding slightly towards apex. Hind wing hyaline, the veins, margins, basal and inner areas black-brown.

Hab. Peru, Carabaya, S. Domingo (*Ockenden*), type † ♀ in Coll. Rothschild. *Exp.* 32 millim.

*385 *i*. **Dasysphinx tarsipuncta.** (Plate V. fig. 27.)

Gymnelia tarsipuncta, Schaus, Pr. U.S. Nat. Mus. xxix. p. 184 (1905).

♀. Head, thorax, and abdomen black, frons with white lateral lines; antennæ white at tips; shoulders with crimson patches; femora, tibiæ, and hind tarsi at extremities with white points; abdomen with large dorsal and lateral crimson patch at base. Fore wing hyaline; the basal area to near middle black, slightly expanding below the cell; the veins black; a large black discoidal lunule; the narrow terminal band expanding into a large apical patch and slightly at submedian fold. Hind wing black with large elliptical hyaline patch beyond the cell between vein 7 and submedian fold, the veins black.

Hab. Brazil, Sta. Catherina, type † ♀ in U.S. Nat. Mus. *Exp.* 48 millim.

385 *j*. **Dasysphinx torquata**, Druce, trans. from *Gymnelia*, no. 393.

* 385 *k*. Dasysphinx bombiformis.

Homœocera bombiformis, Roths. Nov. Zool. xviii. p. 156 (1911), & xix. p. 377, pl. v. f. 35.

♂. Head, thorax, and abdomen dull greyish brown; antennæ black; palpi and legs blackish brown; abdomen with the basal half of ventral surface whitish. Fore wing hyaline, the veins and margins narrowly black. Hind wing hyaline, the veins and margins narrowly black, the inner area dark brown.

Hab. Peru, Marcapata (*Garlepp*), type † ♂ in Coll. Rothschild. *Exp.* 40 millim.

* 385 *l*. Dasysphinx boettgeri.

Gymnelia boettgeri, Roths. Nov. Zool. xviii. p. 28 (1911), & xx. p. 471, pl. xiv. f. 15.

♂. Head, thorax, and abdomen olive-brown; antennæ blackish; pectus in front and ventral surface of abdomen orange-yellow. Fore wing hyaline, the veins and margins narrowly black; the base with some olive-brown. Hind wing hyaline, the veins and margins narrowly black, the inner area olive-brown.

Hab. Peru, Huancabamba, Cerro de Pasco (*Böttger*), type † ♂ in Coll. Rothschild. *Exp.* 34 millim.

* 385 *m*. Dasysphinx garleppi.

Homœocera garleppi, Roths. Nov. Zool. xviii. p. 156 (1911), & xix. p. 377, pl. v. f. 36.

♂. Head, thorax, and abdomen black suffused with metallic blue; tarsi white towards base. Fore wing hyaline, the veins and margins black; the basal area black suffused with blue, the basal half of costa suffused with blue; a broad black discoidal bar conjoined to the costa; the terminal band expanding slightly at apex. Hind wing hyaline, the veins and margins black; the base and inner area black; the terminal band expanding slightly towards apex and strongly angled inwards below vein 2.

Hab. Peru, Marcapata (*Garlepp*), type † ♂ in Coll. Rothschild. *Exp.* 40 millim.

385 *n*. **Dasysphinx herodes**, Druce, trans. from *Gymnelia*, no. 396.

Genus **SCELILASIA**, n. n.

Lasiosceles, Hmpsn. A. M. N. H. (8) iv. p. 345 (1909), nec Beth.-Baker, Lep. 1906 ..... Type. *erythrozonata*.

Proboscis fully developed; palpi upturned, the 2nd joint reaching to about vertex of head and clothed with long hair, the 3rd moderate; antennæ of male with very short branches dilated at extremity from near base to three-fourths, the apex serrate; thorax clothed with rough woolly hair; abdomen with rough hair at base. Fore wing with vein 3 from before angle of cell; 5 from just above angle; 6 from upper angle; 7, 8, 9, 10 stalked; 11 from cell. Hind wing with veins 2, 3, 4 strongly stalked; 5 obsolescent from middle of discocellulars; 6, 7 stalked; the area from apex to below middle of cell and submedian fold on upperside clothed with brownish ochreous androconia.

In key differs from *Gymnelia* in the hind wing having veins 6, 7 stalked 3 stalked with 2.

385 *o*. Scelilasia erythrozonata.

Lasiosceles erythrozonata, Hmpsn. A. M. N. H. (8) iv. p. 345 (1909).

♂. Head and thorax black-brown with a slight bluish gloss; pectus in front and tufts of hair on the femora crimson; abdomen black with crimson dorsal and lateral bands. Fore wing black, the terminal area brownish; two elongate hyaline spots in end of cell and two shorter spots below end of cell; four spots beyond the

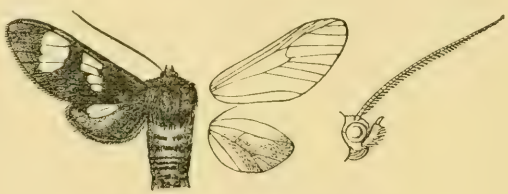

Fig. 19.—*Scelilasia erythrozonata*, ♂. ½.

cell between veins 7 and 3, the upper spots elongate, the lowest wedge-shaped. Hind wing black-brown with two elongate hyaline spots beyond the cell above and below vein 5, the area beyond them and below them to submedian fold brownish ochreous.

Hab. Panama, Chiriqui, 1 ♂ type. *Exp.* 48 millim.

Genus **GYMNELIA**.

Delete the section *Enioche*, the species of which are the males of the genus *Pseudosphenoptera*.

The genus is better distinguished from *Cosmosoma* by the termen of hind wing being excised towards tornus.

* 388 *a*. Gymnelia carabayana.

Cosmosoma carabayanum, Roths. Nov. Zool. xviii. p. 32 (1911), & xx. p. 471, pl. xiv. f. 39.

♂. Head and thorax black; palpi yellow except 3rd joint; frons yellow with black patch below; the back of head and tegulæ near tips with yellow bands; patagia edged with yellow in front and above; dorsum of thorax with slight yellow streak; pectus black and yellow; legs yellow with black streaks on femora and base of tibiæ, the tarsi black at extremities; abdomen black with yellow bands on four basal segments interrupted dorsally, except on two basal segments, by silvery blue spots, the terminal segments with silvery blue bands, lateral series of silvery blue spots, the ventral surface yellow except the terminal segments. Hind wing hyaline, the veins and margins narrowly black; some yellow at base and yellow streaks below basal half of costa and above inner margin; a small apical black patch with irregular inner edge. Hind wing hyaline, the veins and margins black, the inner area yellow at middle, black at base and tornus; the underside with the cell except lower extremity and the median nervure yellow.

Hab. Peru, Carabaya, St. Domingo (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 38 millim.

* 388 *b*. Gymnelia bricenoi.

Cosmosoma bricenoi, Roths. Nov. Zool. xviii. p. 32 (1911), & xx. p. 471, pl. xiv. f. 38.

♀. Head and thorax black; frons orange with black centre; tegulæ with orange bands at base and tips; patagia with orange stripe; gulæ orange; coxæ and fore femora behind orange; abdomen black with orange bands on 2nd to 5th segments, those on 4th and 5th interrupted dorsally by metallic blue spots, the terminal segments with metallic blue bands, the ventral surface black. Fore wing hyaline, the veins and margins narrowly black; slight yellow streaks below basal part of costa and above inner margin; an apical black patch with irregular inner edge. Hind wing hyaline, the veins, margins, and inner area black; the underside with pale yellowish streak in upper part of cell.

Hab. Venezuela, Merida (*Briceno*), type † ♀ in Coll. Rothschild. *Exp.* 34 millim.

* 388 *c*. Gymnelia metallica.

Cosmosoma metallicum, Roths. Nov. Zool. xviii. p. 33 (1911), & xx. p. 472, pl. xiv. f. 45.

♀. Head and thorax black with patches of brilliant metallic green on the frons, vertex of head, tegulæ, patagia, meso- and metathorax, coxæ, femora, and tibiæ; abdomen black with narrow yellow

bands and dorsal patches of brilliant metallic green on 1st four segments, lateral series of green patches, ventral white spots on two basal segments, and subventral series of green spots, the anal tuft yellow at tip. Fore wing hyaline, the veins and margins black; some yellowish hyaline below basal half of costa and above inner margin; a metallic blue spot below base of cell; the black on termen expanding into a large apical patch and slightly at vein 2. Hind wing hyaline, the veins and margins black; the black on termen expanding slightly below apex and into a lunulate patch below vein 2; the underside with yellow fascia in upper part of cell.

Hab. Colombia, Bogotá, type † ♀ in Coll. Rothschild; Brazil, Amazons. *Exp.* 40 millim.

*388 *d*. Gymnelia dubia.

Cosmosoma dubium, Roths. Nov. Zool. xviii. p. 34 (1911), & xx. p. 472, pl. xiv. f. 50.

♀. Head and thorax dark brown, the frons, pro- and metathorax with metallic blue patches; antennæ white at tips; patagia yellow; some yellow below base of wings; coxæ with blue patches; hind tibiæ towards extremities and tarsi yellow; abdomen with the four basal segments yellow with narrow brown lines, the basal segment with quadrate brown patch with blue dorsal spot, the three following segments with triangular brown and blue dorsal spots, the terminal segments brown with subdorsal blue spots, the ventral surface with the basal half yellow with brown and blue patches, the terminal half brown with yellow band on terminal segment. Fore wing hyaline, the veins and margins black-brown; yellow fasciæ below costa and above inner margin and base of vein 1; the brown on termen expanding widely on apical area. Hind wing hyaline, the veins, margins, and inner area black-brown; the terminal band expanding somewhat towards apex; the underside with yellow fascia below costa.

Hab. Jamaica, type † ♀ in Coll. Rothschild. *Exp.* 34 millim.

388 *e*. Gymnelia zelosa. (Plate V. fig. 29.)

Cosmosoma zelosa, Dognin, Ann. Soc. Ent. Belg. xliii. p. 251 (1899).

♀. Head black with metallic blue patch on frons; thorax orange with some black on tegulæ, outer side of patagia, meso- and metathorax, which have blue points; coxæ black with patches of blue; abdomen with the 1st four segments orange with slight segmental lines and small dorsal black and blue spots; the terminal segments black with subdorsal blue patches; the anal tuft partly orange; wings hyaline, the veins and margins black. Fore wing with subcostal orange streak extending to near apex and a streak above inner margin to near tornus; the terminal band expanding towards

apex and with orange on its inner side from vein 3 to tornus. Hind wing with the inner area black.

Hab. Colombia (*Fassl*), 1 ♀, Micay, type † ♀ in Coll. Dognin. *Exp.* 36 millim.

390. **Gymnelia taos,** insert :—

Gymnelia taos, jujuyensis, Jörgensen, Zeits. Wissens. Insektenbiol. ix. p. 76 (1913).

Palpi yellow except at tips ; head and thorax with metallic blue markings ; pectus and underside of abdomen yellow, the latter with blue sublateral spots, the penultimate segment with reddish blue mark.

Argentina, Jujuy. This may be a distinct species.

* 390 *a*. **Gymnelia ottonis.**

Gymnelia baroni, Roths. Nov. Zool. xviii. p. 28 (1911), nec Roths. 1910.
Gymnelia ottonis, Roths. Nov. Zool. xx. p. 470, pl. xiii. f. 21 (1913).

♀. Head and thorax black-brown ; frons with metallic blue spot and edged with orange above ; vertex of head and tegulæ with blue spots ; patagia edged with orange in front and above ; pectus in front and coxæ pale yellow ; legs with some metallic blue, the tibiæ except towards base and the first joint of tarsi yellow ; abdomen with pale yellow bands on two basal segments, the other segments with orange bands expanding into dorsal and lateral spots, and subdorsal series of metallic blue spots, the ventral surface with the three basal segments pale yellow, the anal segment orange-yellow. Fore wing hyaline, the veins and margins black-brown ; a metallic blue spot at base ; a slight yellowish streak below basal half of costa ; a slight black discoidal lunule ; the black on termen expanding on apical area. Hind wing hyaline, the veins and margins black-brown ; the black-brown on termen expanding into a patch at vein 1 ; the underside with orange-yellow streak below basal half of costa.

Hab. Ecuador, Zamora (*Baron*), type † ♀ in Coll. Rothschild. *Exp.* 46 millim.

390 *b*. **Gymnelia pavo,** n. sp. (Plate V. fig. 28.)

♀. Head black with orange patch above frons and metallic blue spot on frons and a pair on vertex of head ; gulæ orange ; palpi orange with a streak on 2nd joint and the 3rd joint black ; thorax black, the tegulæ at tips and streaks on upper edge of patagia at base orange, the tegulæ and prothorax with paired metallic blue spots, the metathorax with blue patch ; pectus orange, the legs streaked with black and the fore coxæ, femora, and base of tibiæ

with metallic blue; abdomen orange, the basal segment yellow, black segmental lines expanding into subdorsal patches with metallic blue spots on them except on basal segment, sublateral series of black patches with metallic blue spots on them, the ventral surface yellow with black lines on 3rd and 4th segments, the extremity black with sublateral orange spots. Fore wing yellowish hyaline with a more orange tinge below costa and above inner margin to beyond middle; the veins and margins narrowly black; a yellow spot at base of costa and three metallic blue points at base of cell; the black on termen expanding on apical area. Hind wing yellowish hyaline, the veins and margins black; the inner margin fringed with orange hair; a conical black patch on termen between vein 2 and tornus; the underside with the costa orange to beyond middle.

Hab. Peru, Huancabamba, 1 ♀ type. *Exp.* 46 millim.

390 *c*. **Gymnelia beata**, Butl., trans. from *Cosmosoma*, no. 496.

* 390 *d*. **Gymnelia hampsoni.** (Plate V. fig. 30.)

Cosmosoma hampsoni, Klages, Pr. U.S. Nat. Mus. xxix. p. 534 (1906).

♂. Head, thorax, and abdomen orange; palpi and lower part of frons yellower; antennæ black, the basal joint yellow on inner side, the vertex of head, tegulæ, meso- and metathorax with paired black spots with metallic blue centres; patagia edged with black; shoulders with metallic blue spots; pectus and legs orange-yellow, the former with metallic blue patches, the fore coxæ whitish, the tibiæ with black stripes towards base usually with metallic blue streaks on them; abdomen orange with black segmental bands with metallic blue subdorsal spots on them connected dorsally on basal segments, the four basal segments narrowly whitish in front, the medial segments usually with lateral black spots often enclosing metallic blue spots, the ventral surface orange-yellow with silvery white band just behind the valve. Fore wing hyaline yellow, the veins and margins narrowly black; a metallic blue spot at base; the black on termen expanding widely on apical area. Hind wing hyaline yellow, the veins and margins narrowly black, the inner area orange towards base, black towards tornus.

♀. Fore coxæ not white; abdomen without white band on 4th segment; fore wing with orange streak above base of inner margin.

Hab. Venezuela (*Klages*). *Exp.* 42 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

390 *e*. **Gymnelia nigricornis**, Fabr., trans. from *Cosmosoma*, no. 497.

*390 *f*. Gymnelia simillima.

Cosmosoma simillimum, Roths. Nov. Zool. xviii. p. 33 (1911), & xx. p. 472, pl. xiv. f. 44.

♂. Head and thorax black-brown; palpi, frons, and vertex of head yellow; tegulæ yellow with black spots; patagia and prothorax with yellow streaks, the meso- and metathorax with yellow spots, the back of head and dorsum of thorax with some metallic blue; pectus and legs yellow, the tibiæ towards base and tarsi towards extremities with black streaks; abdomen black-brown with yellow bands on each segment, subdorsal and sublateral series of metallic blue spots, the ventral valve at extremity and a band beyond it yellow. Fore wing hyaline, the veins and margins narrowly black; slight yellow streaks below basal half of costa and above inner margin; an apical black patch. Hind wing hyaline, the veins and margins black, the inner margin yellow; a black patch on termen at vein 1; the underside with yellow fascia below costa.

Hab. Brazil, Amazons, type † ♂ in Coll. Rothschild. *Exp.* 40 millim.

*390 *g*. Gymnelia steinbachi.

Cosmosoma steinbachi, Roths. Nov. Zool. xviii. p. 33 (1911), & xx. p. 472, pl. xiv. f. 43.

♀. Head and thorax black; palpi yellow in front; frons yellow with black patch; gulæ yellow; tegulæ yellow with black spots; patagia and dorsum of thorax at middle and sides with yellow streaks; the vertex of head and dorsum of thorax with some metallic blue; pectus with yellow patches; fore femora and tibiæ streaked with yellow, the tarsi yellow except towards extremities; abdomen black, the two basal segments with broad yellow bands and the other segments with narrow bands and subdorsal and sublateral metallic blue spots, the ventral surface with broad yellow band at middle. Fore wing hyaline, the veins and margins narrowly black; two yellow points at base and some metallic blue in and below the cell; yellow fasciæ below costa and above inner margin except towards tornus; a small black apical patch. Hind wing hyaline, the veins and margins narrowly black; a black patch on termen at vein 1; the underside with the costal area yellow to beyond middle.

Hab. Bolivia, Buenavista (*Steinbach*), type † ♀ in Coll. Rothschild. *Exp.* 36 millim.

390 *h*. **Gymnelia gaza**, Schaus, trans. from *Cosmosoma*, no. 490.

390 *i*. **Gymnelia eusebia**, Druce, trans. from *Pœcilosoma*, no. 556.

390 *j*. **Gymnelia tarapotensis**, Druce, trans. from *Cosmosoma*, no. 491.

*390 *k*. **Gymnelia villia.** (Plate V. fig. 31.)

Cosmosoma villia, Druce, A. M. N. H. (7) xviii. p. 78 (1906).

♀. Head and thorax yellow; antennæ fulvous; palpi with brown points on 1st joint; back of head with paired black patches; tegulæ and patagia edged with black, the tegulæ, pro- and meso-thorax with paired black patches; pectus with blackish and blue spots at sides; legs orange, the hind tibiæ with black streaks; abdomen fulvous, the basal segments yellow edged with black, the next three segments with yellow lines at base and black tips, and the 3rd, 4th, and 5th with blue subdorsal spots, the ventral surface with the medial segments pale yellow. Fore wing hyaline, the veins and margins narrowly black; slight orange streaks below costa and above inner margin to beyond middle. Hind wing hyaline, the veins and margins narrowly black, the costa yellowish to beyond middle.

Hab. Peru, type † ♀ in Coll. Joicey. *Exp.* 38 millim.

390 *l*. **Gymnelia vesparia**, Perty, trans. from *Cosmosoma*, no. 537.

*390 *m*. **Gymnelia stuarti.**

Cosmosoma stuarti, Roths. Nov. Zool. xviii. p. 34 (1911), & xx. p. 472, pl. xiv. ff. 47, 48.

♂. Head fulvous yellow, the base of antennæ and a band at back of head black; thorax black, the tegulæ yellow with black spots, the patagia with yellow streaks hooked at base, the dorsum of thorax with pair of yellow streaks confluent on mesothorax, the metathorax with yellow patch; pectus yellow; legs fulvous yellow, the fore and mid tarsi with slight black streaks towards extremities, the mid and hind femora with small black spots at base, the mid and hind tibiæ with black streaks; abdomen with the three basal segments banded black and yellow, the 3rd with subdorsal blue spots on the black band, the terminal segments fulvous yellow with subdorsal black and blue spots on 4th and 5th segments, the ventral surface with the basal half pale yellow, the terminal half fulvous yellow. Fore wing hyaline, the veins and margins black, a slight yellow streak below costa and yellow fascia above basal half of inner margin; the black on termen expanding and with somewhat dentate inner edge towards apex. Hind wing hyaline, the veins and margins black; the termen with wedge-shaped black patch at submedian fold; the underside with yellow streak below costa.

Ab. 1. Antennæ with the shafts wholly black above.

Hab. Brazil, Amazons, Inquitos (*Stuart*), type † ♂ in Coll. Rothschild. *Exp.* 36–44 millim.

390 *n*. **Gymnelia sephela**, Druce, trans. from *Cosmosoma*, no. 498.

390 *o*. **Gymnelia cincta**, Schaus, trans. from *Cosmosoma*, no. 489,

390 *p*. **Gymnelia scita**, Wlk., trans. from *Cosmosoma*, no. 536.

390 *q*. **Gymnelia lycopolis**, Druce, trans. from *Cosmosoma*, no. 488.

390 *r*. **Gymnelia flavitarsis**, Wlk., trans. from *Cosmosoma*, no. 492.

*390 *s*. Gymnelia baroni.

Cosmosoma baroni, Roths. Nov. Zool. xviii. p. 32 (1911), & xx. p. 472, pl. xiv. f. 41.

♀. Head and thorax black, the frons, vertex of head, tegulæ, base of patagia and dorsum of thorax with metallic blue spots; antennæ with the basal joint white in front; coxæ and basal joint of hind tarsi white; abdomen black, the 2nd segment with subdorsal yellow points, the 3rd and 4th with narrow yellow bands, and the 5th with subdorsal points, the extremity yellow, the medial segments with subdorsal blue bands, the ventral surface with the basal half white. Fore wing hyaline, the veins and margins narrowly black-brown; some metallic blue at base in and below the cell; a small apical black-brown patch. Hind wing hyaline, the veins and margins narrowly black-brown; a small black-brown patch on termen at vein 1; the underside with pale yellowish streak in upper part of cell.

Hab. Ecuador, Zamora (*Baron*), type † ♀ in Coll. Rothschild. *Exp.* 40 millim.

390 *t*. Gymnelia guapila. (Plate V. fig. 32.)

Cosmosoma guapila, Schaus, A. M. N. H. (8) vii. p. 176 (1911).

♂. Head and thorax black, the frons, vertex of head, and tegulæ with patches of metallic blue, the patagia with blue streaks; antennæ with the basal joint white in front; pectus at sides and fore coxæ with patches of metallic blue, the legs streaked with blue, the hind coxæ white; abdomen black with yellowish white segmental lines at base of 3rd and 4th segments, the 2nd segment with dorsal patch of metallic blue, and a lateral series of patches, the extremity of ventral valve and a band beyond it white, the extremity of abdomen orange. Fore wing hyaline, the veins and margins black; a black patch at base of inner area with some metallic blue on it on median nervure and vein 1. Hind wing hyaline, the veins and margins black; the base of costal area and the inner area black.

Hab. Costa Rica, Guapiles (*Schaus*), 1 ♂. *Exp.* 30 millim.

390 *u*. **Gymnelia beatrix**, Druce, trans. from *Cosmosoma*, no. 493.

391 *a*. **Gymnelia salvini**, Butl., trans. from *Cosmosoma*, no. 494.

391 *b*. Gymnelia colona. (Plate VI. fig. 1.)

Cosmosoma colona, Schaus, A. M. N. H. (8) vii. p. 177 (1911).

♀. Head and thorax black, the lower part of frons white; vertex of head, tegulæ, and patagia with metallic blue patches; pectus at sides and mid and hind coxæ with white patches, the tibiæ streaked with metallic blue; abdomen black with metallic blue subdorsal patches, the three terminal segments orange, the ventral surface with white band near base. Fore wing hyaline, the veins and margins black, the fascia on inner margin expanding towards base; a metallic blue spot below base of costa; a black discoidal bar; the terminal band expanding widely on apical area and slightly below vein 2. Hind wing hyaline, the veins and margins black; the cell except a minute spot in lower extremity and the inner area black; the black on termen expanding on apical area.

Hab. Costa Rica, Sixola R. (*Schaus*), 1 ♀. *Exp.* 32 millim.

*391 *c*. Gymnelia lucens. (Plate VI. fig. 2.)

Cosmosoma lucens, Dogn. Ann. Soc. Ent. Belg. xlvi. p. 226 (1902).

♂. Head, thorax, and abdomen black; frons, vertex of head, tegulæ, shoulders, patagia, meso- and metathorax, pectus and legs with brilliant metallic blue patches; coxæ white in front; abdomen with creamy white dorsal band on 1st segment and lines on the next two, subdorsal series of brilliant blue bands and sublateral series of spots, ventral valve with the terminal half white followed by a white band, the terminal segment with whitish patch. Fore wing yellowish hyaline, deeper at base and below costa, the veins and margins black; a blue point at base; the terminal band expanding into an apical patch and slightly at vein 2. Hind wing hyaline, the veins and margins black; a discoidal point; the terminal band expanding into a wedge-shaped patch in submedian fold.

Hab. Colombia, Popayan, type † ♂ in Coll. Dognin. *Exp.* 42 millim.

*391 *d*. Gymnelia hyaloxantha. (Plate VI. fig. 3.)

Gymnelia hyaloxantha, Dogn. Hét. Nouv. Am. Sud, vii. p. 4 (1914).

♀. Head, thorax, and abdomen black-brown, the vertex of head and tegulæ with metallic blue spots; hinderpart of pectus and coxæ with white spots; abdomen with lateral orange bars on 1st segment and metallic blue bands on 2nd to 6th segments, the ventral surface with some yellowish at sides of 2nd segment. Fore wing yellowish hyaline, the veins and margins black; an orange streak below costa to beyond middle and streak above base of inner margin; a narrow black discoidal bar; the black on termen expanding widely towards apex and slightly below vein 2. Hind

wing hyaline with a yellowish tinge except below the cell, the veins, margins, and inner area black; the black on termen expanding somewhat towards apex; the underside with orange below costa to beyond middle and in upper part of cell.

Hab. Colombia, Muzo (*Fassl*), type † ♀ in Coll. Dognin. *Exp.* 42 millim.

391 *e*. **Gymnelia nobilis.** (Plate VI. fig. 4.)

Cosmosoma nobilis, Schaus, A. M. N. H. (8) vii. p. 175 (1911).

Head and thorax black, the frons, vertex of head and metathorax with metallic blue patches; legs streaked with metallic blue; abdomen black with metallic blue subdorsal spots on 1st segment and patch on terminal segment, the intermediate segments with yellow segmental lines and lateral blue bands, the ventral valve with slight lateral white patches. Fore wing hyaline, the veins black, the costal and inner margins with black fasciæ, the base black with metallic blue spots below costa and cell; a black discoidal patch conjoined to the costal area; the terminal band expanding widely on apical area and slightly below vein 3. Hind wing hyaline, the veins black, the inner margin with black fascia, the terminal band expanding on apical area.

Hab. Costa Rica, Tuis (*Schaus*), 1 ♂, 1 ♀, Sitio (*Schaus*), 2 ♂, Juan Vinas (*Schaus*), 1 ♀. *Exp.* 44 millim.

*391 *f*. **Gymnelia viridicingulata.**

Cosmosoma viridicingulatum, Roths. Nov. Zool. xviii. p. 32 (1911), & xx. p. 472, pl. xiv. f. 40.

♀. Head and thorax black; the frons and vertex of head suffused with metallic blue, the former with two orange spots above; antennæ with the basal joint white in front; tegulæ with orange band, the patagia and dorsum of thorax with slight orange streaks and some metallic blue; gulæ orange; fore coxæ and the femora with some metallic blue; abdomen black-brown with orange bands on each segment with metallic blue bands between them except at base, the extremity orange, the ventral surface with the basal half white. Fore wing hyaline, the veins and margins narrowly brown; some metallic blue below base of cell; the brown on termen expanding slightly towards apex. Hind wing hyaline, the veins, margins, and inner area brown; the underside with whitish fascia in upper part of cell.

Hab. Ecuador, type † ♀ in Coll. Rothschild. *Exp.* 36 millim.

391 *g*. **Gymnelia peratea.** (Plate VI. fig. 5.)

Gymnelia peratea, Dogn. Hét. Nouv. Am. Sud, i. p. 3 (1910).

♂. Head, thorax, and abdomen orange; palpi black at tips; antennæ black; tegulæ with black band at base, the patagia with

black outer edge; tarsi streaked with black; abdomen with black band on 1st segment, subdorsal patches on 2nd segment and black bands shot with brilliant blue on the other segments. Fore wing hyaline, the veins and margins narrowly black; slight yellow streaks below base of subcostal nervure and above vein 1; a small rounded black apical patch. Hind wing hyaline, the veins and margins narrowly black; the inner area black; a small apical black patch; the underside with the base of costal area yellow.

Hab. Colombia, San Antonio (*Fassl*), type † ♂ in Coll. Dognin, Monte Tolima (*Fassl*), 1 ♂. *Exp.* 42 millim.

*391 *h*. Gymnelia doncasteri.

Gymnelia doncasteri, Roths. Nov. Zool. xviii. p. 28 (1911), & xx. p. 471, pl. xiv. f. 17.

♀. Head and thorax black; palpi except at base and tips orange; frons orange with a black spot at middle; tegulæ orange with a black band at middle; patagia with wedge-shaped orange patches; dorsum of thorax with orange streak, the metathorax with orange line; pectus orange in front; legs streaked black and orange, the fore coxæ with some white at sides; abdomen black, with rather narrow orange bands except on ventral surface, the terminal segments with metallic blue subdorsal and sublateral spots. Fore wing hyaline, the veins and margins narrowly black; some orange scales at base of cell and a faint streak above base of inner margin; the terminal line expanding into a small patch at apex. Hind wing hyaline, the veins and margins narrowly black, the inner area black; the underside with yellowish white streak in cell.

Hab. Venezuela, Caracas, type † ♀ in Coll. Rothschild. *Exp.* 32 millim.

*391 *i*. Gymnelia ichneumonoides.

Cosmosoma ichneumonoides, Roths. Nov. Zool. xviii. p. 34 (1911), & xx. p. 472, pl. xiv. f. 46.

♀. Head and thorax fulvous yellow, the upper side of shaft of antennæ, spots on tegulæ and patagia in front tinged with crimson; abdomen blackish, the basal segment fulvous yellow with a small dorsal blackish spot at base, the three following segments with fulvous yellow bands, the ventral surface with the basal half pale yellow. Fore wing yellowish hyaline; the veins fulvous yellow, brown on terminal area; the costal area and base of inner margin crimson; cilia brown. Hind wing yellowish hyaline; the veins fulvous yellow, brown on terminal area; cilia brown; the underside with the costal area tinged with crimson.

Hab. Bolivia, Sta. Cruz de la Sierra (*Steinbach*), type † ♀ in Coll. Rothschild. *Exp.* 32 millim.

391 *j*. **Gymnelia ethodæa**, Druce, trans. from *Cosmosoma*, no. 534, and insert (syn.) :—

Autochloris patagiata, Dyar, Proc. Ent. Soc. Wash. xi. p. 19 (1909).

*392 *a*. Gymnelia paranapanema. (Plate VI. fig. 6.)

Gymnelia paranapanema, Dogn. Hét. Nouv. Am. Sud, ii. p. 4 (1911).

♀. Head and thorax black-brown with some blue suffusion on vertex of head and tegulæ; mid and hind coxæ with yellow spots; abdomen deep orange, the three basal segments and part of the 4th black-brown, the 2nd and 3rd segments with lateral metallic blue bands, the ventral surface with the 1st three segments brown with orange segmental line on 2nd segment. Fore wing hyaline, the veins and margins black-brown; a black-brown discoidal bar conjoined to the costal fascia; a black streak in discoidal fold not reaching termen; a black streak in submedian fold, the terminal band expanding slightly at its extremity. Hind wing hyaline, the veins and margins black-brown; a narrow black-brown discoidal bar; the terminal band expanding below vein 2 with irregular inner edge.

Hab. Brazil, São Paulo, Paranapanema, type † ♀ in Coll. Dognin. *Exp.* 50 millim.

402 *a*. Phœnicoprocta flavipicta. (Plate VI. fig. 7.)

Phœnicoprocta flavipicta, Hmpsn. A. M. N. H. (8) iv. p. 345 (1909).

♂. Head and tegulæ black-brown with patches of metallic blue, the tegulæ with yellow patches; palpi greyish in front; antennæ white at tips; patagia yellow; thorax brown; pectus at sides with patches of yellow and metallic blue, the fore coxæ white, the mid and hind coxæ yellow; abdomen brown with patches of metallic blue, the 1st segment with paired dorsal yellow stripes, the other segments with yellow dorsal bands, the anal tuft orange, the ventral valve yellow edged with white. Fore wing hyaline, the veins and margins black; a black discoidal bar, the terminal band expanding towards apex. Hind wing hyaline, the veins, costal area, and a terminal band black.

Hab. Br. Guiana (*Rodway*), 1 ♂ type. *Exp.* 32 millim.

404 *a*. Phœnicoprocta analis. (Plate VI. fig. 8.)

Phœnicoprocta vacillans, Hmpsn. Cat. Lep. Phal. B.M. i. p. 197 (part.), nec Wlk.
Phœnicoprocta analis, Schrottky, Iris, xxii. p. 123 (1909).
Phœnicoprocta nigrivalvata, Dogn. Hét. Nouv. Am. Sud, ii. p. 4 (1911).

♂. Head and thorax black, the frons, vertex of head, tegulæ, shoulders and dorsum of thorax with metallic blue patches; pectus and legs with some metallic blue; fore coxæ white in front; abdomen black with the two terminal segments deep orange, a dorsal

series of metallic blue spots and subdorsal spots on basal segment, some blue suffusion at sides except towards extremity. Fore wing hyaline, the veins and margins black, the latter rather broadly; a black streak in submedian fold; a blue point at base. Hind wing hyaline, the veins and margins black.

Hab. S. Brazil, Sta. Catherina, 1 ♂; Paraguay, Puerto Bertoni (*Schrottky*), 2 ♂; Argentina, Haut-Paraña, San Ignacio Missiones (*Wagner*), type † ♂ *nigrivalvata* in Coll. Dognin. *Exp.* 34 millim.

406 *a*. **Phœnicoprocta carminata.** (Plate VI. fig. 9.)

Bombiliodes carminata, Hmpsn. A. M. N. H. (7) vii. p. 246 (1901).

♀. Head and thorax black irrorated with metallic blue; tegulæ except at middle and patagia except outer edge crimson; palpi crimson and white in front; pectus crimson with black and blue patches at sides and some white on legs; abdomen crimson with blue-irrorated black dorsal fascia expanding intersegmentally and ventral bands on terminal segments. Fore wing black irrorated with metallic blue; an antemedial hyaline spot in and below cell; a medial band from subcostal nervure to vein 1 and a postmedial band from vein 7 to 2. Hind wing hyaline, the veins and a terminal band broad towards apex and expanding irregularly below vein 2 black, the inner margin crimson.

Hab. Bahamas, Nassau (*Bonhote*), 1 ♀ type. *Exp.* 32 millim.

406 *b*. **Phœnicoprocta biformata.** (Plate VI. fig. 10.)

Phœnicoprocta biformata, Gibbs, Entom. xlvii. p. 54 (1914).

♀. Head black, the frons and vertex suffused with metallic blue; antennæ white before tips; palpi orange in front at base; thorax scarlet, the tegulæ at base and shoulders black; pectus and legs black, the former with some metallic blue at sides, the coxæ scarlet; abdomen black tinged with blue and with metallic blue dorsal and lateral stripes and subdorsal crimson streaks on basal segment. Fore wing hyaline, the veins and margins rather broadly black; a black discoidal spot conjoined to the costal fascia; the terminal band expanding widely on apical area and below vein 2. Hind wing hyaline, the veins and margins black, the terminal band expanding towards apex and below vein 2.

Ab. 1. Fore wing wholly black.

Hab. Br. Honduras, Punta Gorda (*Norton*), 2 ♀ type. *Exp.* 32 millim.

407 *a*. **Phœnicoprocta jamaicensis.** (Plate VI. fig. 11.)

Bombiliodes jamaicensis, Schaus, J. N.Y. Ent. Soc. ix. p. 40 (1901).

Head and thorax black with some metallic blue scales; antennæ white at tips; tegulæ and patagia with crimson and white stripe; legs with some metallic blue; tarsi banded with

white; abdomen crimson with dorsal segmental black and black dorsal line except on terminal segment. Fore wing hyaline irrorated with black; the veins black; the marginal areas broadly black, the terminal band expanding very widely on apical area, a spot in middle of cell and large round discoidal spot both conjoined to the black costal area; the black areas irrorated with white; a metallic blue patch at base. Hind wing hyaline, the veins and margins black, the terminal band expanding on apical area and dentate towards tornus.

Hab. Jamaica, type † ♀ in U.S. Nat. Mus., Runaway Bay (*Walsingham*), 1 ♂. *Exp.* 40 millim.

407 *b*. **Phœnicoprocta capistrata**, Fabr., trans. from *Bombiliodes*, no. 362, and insert (syns.) :—

Glaucopis thomæ, Lucas, Sagra's Hist. Cuba, Ins. p. 660 (1857).
Phœnicoprocta cubana, Druce, A. M. N. H. (7) iii. p. 228 (1899).

Types † *selecta* and *thomæ* in Coll. Oberthur, *cubana* in Coll. Joicey.

The males have the whole fore wing hyaline except the margins and discal spot, whilst in the female the extent of the dark areas is very variable.

*410 *a*. **Phœnicoprocta chamboni**. (Plate VI. fig. 12.)

Phœnicoprocta chamboni, Dogn. Ann. Soc. Ent. Belg. xlvi. p. 473 (1902).

♂. Head and thorax black shot with brilliant blue; palpi crimson at base; tegulæ with orange tips; patagia orange with black outer edge; throat and fore coxæ in front creamy white, fore coxæ at sides and base of femora crimson; abdomen black shot with blue; subdorsal orange patches on 1st five segments, the anal tuft crimson, the ventral surface with crimson patch behind the ventral valve. Fore wing black with two hyaline streaks in end of cell and two below middle of cell; short streaks beyond the cell between veins 7 and 3. Hind wing black with hyaline patch below the cell and on inner area and beyond the cell between veins 7 and 2.

Hab. San Salvador, type † ♂ in Coll. Dognin. *Exp.* 38 millim.

413. **Phœnicoprocta teda**, insert (syn.) :—

Leucotmemis pleuræmata, paranensis, Schrottky, Iris, xxiv. p. 150 (1910).

*413 *a*. **Phœnicoprocta steinbachi**.

Phœnicoprocta steinbachi, Roths. Nov. Zool. xviii. p. 29 (1911), & xx. p. 471, pl. xiv. f. 19.

♂. Head, thorax, and abdomen black-brown suffused in parts with metallic blue; antennæ white above towards tips; fore coxæ white; the ventral valve edged with white behind; the anal tuft

and a ventral band on penultimate segment crimson. Fore wing hyaline, the veins and margins rather broadly black-brown, the costal area tinged with blue; a black-brown discoidal spot connected with the costal area; the terminal band expanding widely on apical area and moderately below vein 2. Hind wing hyaline, the veins and margins black-brown; the terminal band expanding somewhat towards apex and below vein 2; the underside with the cell and costal area black-brown.

Hab. Bolivia, Buena Vista (*Steinbach*), type † ♂ in Coll. Rothschild. *Exp.* 32 millim.

*413 *b*. Phœnicoprocta baeri.

Phœnicoprocta baeri, Roths. Nov. Zool. xviii. p. 28 (1911), & xx. p. 471, pl. xiv. f. 18.

♂. Head, thorax, and abdomen black-brown shot with metallic blue; antennæ white above towards tips; fore coxæ white; ventral valve edged with white behind; anal tuft crimson. Fore wing black-brown, the costal and inner areas glossed with blue; a wedge-shaped hyaline patch in cell bisected by the streak in discal fold; an elongate patch below the cell from near base to below base of vein 2. Hind wing hyaline, the veins and margins black-brown; the terminal band broad at costa, narrowing to a point at tornus; the underside with the cell and costal area black-brown.

Hab. Brazil, Goyas, R. Uruhu, Fazenda Esperança (*Baer*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

417 *a*. Eunomia caymanensis. (Plate VI. fig. 13.)

Eunomia caymanensis, Hmpsn. A. M. N. H. (8) viii. p. 395 (1911).

♀. Head and thorax black; palpi white in front and behind; frons edged with white except above at middle; gulæ and a point on vertex of head white; tegulæ and patagia edged with white, the dorsum of thorax with white streak and the meso- and metathorax edged with white behind; pectus, fore coxæ at sides and the femora above except at extremities crimson, the coxæ white in front, the legs streaked with white; abdomen black with subdorsal series of white and crimson bars, the terminal segments with dorsal white segmental lines, the anal segment with white patch, lateral crimson stripes, the ventral surface crimson at base, then with crimson bands. Fore wing hyaline, the veins and margins black slightly irrorated with white; an oblique white striga below base of cell and streak on base of vein 1; a black discoidal bar conjoined to the black on costa; the terminal band expanding widely on apical area and below vein 2, its inner edge angled inwards at discal fold. Hind wing hyaline, the veins and margins black slightly irrorated with white, the inner area black to submedian fold, the black on termen expanding widely on apical area.

Hab. Grand Cayman, Georgetown (*Savage-English*), 1 ♀ type. *Exp.* 32 millim.

*419 *a*. Pheia costalis.

Pheia costalis, Roths. Nov. Zool. xviii. p. 29 (1911), & xx. p. 471, pl. xiv. f. 20.

♂. Head black-brown, the frons and small spots behind antennæ white; thorax orange-yellow with a dorsal black streak, short streaks at middle of upper edge of patagia, and small spots on shoulders; fore tibiæ and tarsi streaked with black, the extremities of mid and hind femora black, the mid tarsi towards extremities and the hind tarsi towards base black; abdomen orange-yellow with dorsal series of black spots with some silvery blue on them, the two terminal segments black with dorsal silvery blue spots, the three medial segments with small lateral black spots. Fore wing hyaline, the veins and margins black; some yellow at base and a fascia below costa to beyond middle; some yellow on extremity of median nervure and base of vein 2; the inner margin yellow from before middle to near tornus; the terminal black band expanding widely on apical area and slightly below vein 2. Hind wing hyaline, the veins, inner area and termen black, the cell and costa yellow; the terminal band expanding slightly towards apex; the cilia of inner margin yellow; the underside with the base yellow.

Hab. Bolivia, Yungas de la Paz (*Garlepp*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

*419 *b*. Pheia plebecula. (Plate VI. fig. 14.)

Cosmosoma plebecula, Dogn. Ann. Soc. Ent. Belg. xlvi. p. 226 (1902).

♂. Head black; thorax yellow with black patch on dorsum, the legs black; abdomen yellow with black dorsal patch on 2nd, 3rd, and 4th segments, the last two segments above and the last three on ventral surface black. Fore wing hyaline, the veins and margins black, the black expanding at base of costa and inner margin, the terminal band expanding into an apical patch and at tornus. Hind wing hyaline, the veins and margins black, the black on inner margin rather broad and on termen expanding into an apical patch.

Hab. Colombia, Popayan, type † ♂ in Coll. Dognin. *Exp.* 24 millim.

*420 *a*. Pheia mathona.

Phacusa mathona, Dogn. Le Nat. (2) v. p. 125 (1891); id. Lép. Loja, p. 82, pl. 8. f. 1; Kirby, Cat. Lep. Het. p. 902.

♀. Head and thorax black-brown; palpi orange except at tips; frons ringed with orange; gulæ orange; tegulæ with orange patches; patagia with orange points; meso- and metathorax with paired orange points; pectus orange in front; legs streaked with orange; abdomen black-brown with lateral orange bands except at extremity, formed of orange patches meeting dorsally on 2nd

segment, the terminal segment with some metallic blue, the anal tuft orange; ventral surface orange. Fore wing hyaline, the veins and margins black; a yellow streak below costa to beyond middle and slight streak above base of inner margin; the terminal band expanding on apical area. Hind wing hyaline, the veins and margins black; the inner area with some yellow hair, the underside with slight yellow streaks at base of costal area.

Hab. Ecuador, Loja, type † ♀ in Coll. Dognin. *Exp.* 24 millim.

420 *b*. **Pheia flavicincta.** (Plate VI. fig. 15.)

Pheia flavicincta, Dogn. Ann. Soc. Ent. Belg. l. p. 178 (1906).

♂. Head, thorax, and abdomen black; palpi yellow except 3rd joint; frons and vertex of head with white points; tegulæ and metathorax with paired yellow spots; shoulders, pectus in front, fore coxæ and hind legs yellowish white, fore and mid legs with yellowish streaks; abdomen with the lateral area yellow at base, followed by a series of subdorsal yellow bars, the ventral valve white followed by white segmental bands, the anal tuft yellow. Fore wing hyaline, the veins and margins black; a slight yellowish streak below costa to beyond middle; the terminal band expanding moderately at apex. Hind wing hyaline, the veins and margins black; the cell yellowish at base; the inner area pale yellow; the terminal band expanding slightly at apex and tornus.

Hab. Argentina, Tucuman, 1 ♂. *Exp.* 28 millim. Type † ♂ in Coll. Dognin.

420 *c*. **Pheia discophora.** (Plate VI. fig. 16.)

Pheia discophora, Dogn. Ann. Soc. Ent. Belg. liii. p. 213 (1909).

♂. Head and thorax black, the patagia with slight yellow streaks; fore and mid legs orange behind, the hind legs orange; abdomen black, the 1st segment with pair of slight orange tufts of hair at base, the 2nd with orange band, the anal tuft tipped with orange, the ventral surface orange. Fore wing hyaline, the veins and margins narrowly black, the terminal line expanding somewhat at apex; a yellow streak below costa to beyond middle; an oblique black discoidal patch with some yellow scales on it. Hind wing hyaline, the veins and margins narrowly black. Underside of fore wing with the discoidal patch orange.

Hab. Colombia, type † ♂ in Coll. Dognin, Cordoba, Pacho (*Fassl*), 2 ♂. *Exp.* 26 millim.

*422 *a*. **Pheia bisigna.** (Plate VI. fig. 17.)

Pheia bisigna, Kaye, Entom. xliv. p. 146 (1911).

♂. Head and thorax black-brown; palpi at base and in front white; frons with white spots below and at sides above; antennæ

with the shaft white above towards tips; patagia with crimson spots at base; pectus in front and fore coxæ white, the legs streaked with white below; abdomen black-brown, the basal segment with subdorsal white spots, the extremity dorsally suffused with grey-blue, the ventral valve white. Fore wing hyaline, the veins and margins black-brown; a small crimson subbasal spot below the cell; the terminal band expanding widely on apical area and below vein 2. Hind wing hyaline, the veins and margins black, the terminal band expanding on apical area.

Hab. Br. Guiana, Potaro R. (*Roberts*), type † ♂ in Coll. Kaye. *Exp.* 26 millim.

*422 *b*. **Pheia hæmatosticta.** (Plate VI. fig. 18.)

Pheia hæmatosticta, D. Jones, Trans. Ent. Soc. 1908, p. 143.

♀. Head, thorax, and abdomen black-brown; palpi with white points at base; antennæ with some white towards tips; shoulders and tegulæ with crimson spots; sides of pectus and coxæ with white patches; abdomen with ventral white fascia on 1st two segments. Fore wing hyaline, the veins black, the margins broadly black-brown; a crimson spot below base of cell; a black discoidal spot; the terminal band expanding widely on apical area and at tornus. Hind wing hyaline, the veins and margins black-brown; the terminal band expanding on apical area.

Hab. Brazil, Castro Paraña, type † ♀ in Coll. D. Jones. *Exp.* 34 millim.

*423 *a*. **Pheia lateralis.** (Plate VI. fig. 19.)

Pheia lateralis, Klages, Pr. U.S. Nat. Mus. xxix. p. 533 (1906).

♀. Head black-brown, the antennæ with the shaft white towards tips and with minute streaks behind their bases; thorax black-brown with crimson patches on tegulæ, shoulders, meso- and metathorax; coxæ with white patches; abdomen black-brown with a pair of subdorsal white streaks at base followed by subdorsal golden-green spots on the other segments, lateral crimson stripes, narrower and more orange behind the 6th segment, the ventral surface with the three basal segments white. Fore wing hyaline, the veins and margins black-brown; a crimson patch at base emitting a streak below costa to beyond middle and a short streak above inner margin; a black discoidal spot conjoined to the black costa; the terminal band expanding widely on apical area and below vein 2. Hind wing hyaline, the veins and margins black; the terminal band expanding towards apex.

Hab. Venezuela, Suapure (*Klages*). *Exp.* 32 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

423 *b*. **Pheia hæmapleura**, n. sp. (Plate VI. fig. 20.)

♀. Head black-brown with white ponts at sides of frons and behind antennæ, which are white towards tips; thorax scarlet; pectus and legs brown, the coxæ with white patches, the fore and mid tarsi white at base; abdomen black-brown, two white subdorsal streaks on basal segment, scarlet lateral fasciæ except on basal segment, the ventral surface with the two basal segments white tinged with yellow. Fore wing hyaline, the veins and margins black-brown; the base scarlet, emitting streaks below the costa and above inner margin to beyond middle; a black-brown discoidal spot conjoined to the costal area; the terminal band expanding widely on apical area and below vein 2. Hind wing hyaline, the veins and margins brown, the terminal band expanding widely towards apex.

Hab. Brazil, Matto Grosso, 2 ♀ type. *Exp.* 26 millim.

*425 *a*. **Pheia pyrama**. (Plate VI. fig. 21.)

Pheia pyrama, Dogn. Hét. Nouv. Am. Sud, iii. p. 3 (1911).

♂. Head and thorax black-brown; frons white; shoulders with crimson spots; coxæ white, the fore femora streaked with white; abdomen black-brown with a slight bluish gloss towards extremity, the ventral surface with the basal segments white. Fore wing hyaline, the veins and margins black-brown; the costal and inner margins rather broadly black-brown; a black-brown discoidal patch; the terminal band expanding widely on apical area and below vein 2. Hind wing hyaline, the veins and margins black-brown, the terminal band expanding rather widely on apical area; the underside with the cell filled in with black-brown.

Hab. Fr. Guiana, St. Jean Maroni (*Le Moult*), type † ♂ in Coll. Dognin. *Exp.* 20 millim.

*425 *b*. **Pheia xanthozona**. (Plate VI. fig. 22.)

Pheia xanthozona, Dogn. Hét. Nouv. Am. Sud, i. p. 3 (1910).

♂. Head and thorax black-brown; frons white; tegulæ and patagia except at tips orange-red; coxæ and inner side of femora white; abdomen black-brown shot with blue, the basal segment orange, the next segment orange-red at base, extending laterally to the 3rd segment, the ventral surface white at base. Fore wing hyaline, the veins and marginal areas black-brown; some yellow scales at base of inner margin; a quadrate black discoidal patch conjoined to the black costal area; the terminal band expanding widely on apical area and below vein 2. Hind wing hyaline, the margins, cell and veins black; the terminal band expanding widely on apical area and to a slight tooth at vein 2.

Hab. Fr. Guiana, St. Laurent Maroni, type † ♂ in Coll. Dognin. *Exp.* 22 millim.

*426 *a*. **Mimagyrta abdominalis.** (Plate VI. fig. 23.)

Agyrta abdominalis, Roths. Nov. Zool. xix. p. 162 (1912).

Head and thorax black-brown; palpi with the extremity of 1st joint and the 2nd and 3rd joints in front white; frons at sides and basal joint of antennæ in front white; tegulæ dorsally and prothorax with pairs of white points, the patagia towards extremities and sides of metathorax with some white, the latter with blue dorsal streak; pectus mostly white, the coxæ and streaks on legs white; abdomen black-brown, with subdorsal white streaks except at extremity, the ventral surface white. Fore wing black; a metallic blue streak below base of cell; a wedge-shaped hyaline patch in end of cell, a triangular patch above base of vein 2 and an oblique streak below vein 2; an obliquely curved hyaline postmedial band between veins 7 and 3, intersected by the black veins. Hind wing black shot with blue; a hyaline fascia in lower part of cell, below the cell and beyond its lower extremity from base to near termen where its extremity is rounded; the hair on inner margin white. Underside of fore wing with some white at base; hind wing with white streaks below base of costa and on subcostal nervure.

Hab. Venezuela, Suapure; Fr. Guiana, Kouroa R., Gordonville; Surinam, Berg-en-Daal; Brazil, Amazons, R. Madeira, Humayta (*Hoffmanns*), type † ♂, ♀ in Coll. Rothschild. *Exp.*, ♂ 28, ♀ 32 millim.

*426 *b*. **Mimagyrta pulchella.** (Plate VI. fig. 24.)

Mimagyrta pulchella, Klages, Pr. U.S. Nat. Mus. xxix. p. 534 (1910).

♀. Head and thorax black-brown; palpi with white streaks in front; frons, streaks behind the antennæ, spots on shoulders, and paired spots on pro-, meso-, and metathorax white; tegulæ edged with white above and with some metallic blue scales, the patagia with small whitish patches; pectus and legs white, the latter streaked with brown; abdomen black-brown with subdorsal lines and series of lateral patches whitish, the ventral surface white. Fore wing black-brown; a white point at base of subcostal nervure; a yellow fascia below basal half of cell and some metallic blue at base of inner margin; an oblique medial yellow band from subcostal nervure to submedian fold interrupted by black streaks on the veins; an obliquely curved postmedial band formed by hyaline spots in the interspaces between veins 7 and 3. Hind wing black-brown; a yellow fascia below the cell from base to towards termen where it extends to above vein 4; some metallic blue scales on vein 1; the hair on inner margin white; the underside with whitish streak on base of costal area and with yellowish mark below the yellow fascia.

Hab. Venezuela, Suapure (*Klages*). *Exp.* 34 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

*427 *a*. Loxophlebia aurantiaca. (Plate VI. fig. 25.)

Loxophlebia aurantiaca, D. Jones, Trans. Ent. Soc. 1908, p. 143.

♂. Head black with two whitish points on frons above and two behind antennæ; thorax orange with small black spot on prothorax and slight dorsal streak; pectus and legs black-brown with white patches on the coxæ; abdomen orange with black dorsal streak on 1st two segments and the two terminal segments black, the ventral surface brown, the ventral valve fulvous orange edged with white. Fore wing hyaline, the veins and margins black-brown; the base orange; the terminal band expanding widely on apical area and slightly at tornus. Hind wing hyaline, the veins and margins black-brown.

Hab. Brazil, São Paulo, type † ♂ in Coll. D. Jones. *Exp.* 26 millim.

*427 *b*. Loxophlebia brasiliensis.

Cosmosoma brasiliense, Roths. Nov. Zool. xviii. p. 36 (1911), & xx. p. 470, pl. xiii. f. 16.

♂. Head black-brown; thorax orange-yellow; pectus except just below wings and legs black-brown; coxæ white; abdomen orange-yellow, the two terminal segments and ventral surface black-brown, the ventral valve white. Fore wing hyaline, the veins and margins black-brown; the base orange-yellow with irregular outer edge; a black-brown discoidal bar conjoined to the costal area; the terminal band expanding widely on apical area and moderately below vein 2. Hind wing hyaline, the veins and margins black-brown; the base with some yellow; the terminal band expanding slightly towards apex; the underside with the basal costal area yellow.

Hab. Brazil, Sta. Catherina, type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

*427 *c*. Loxophlebia metamela. (Plate VI. fig. 26.)

Loxophlebia metamela, Dogn. Hét. Nouv. Am. Sud, iii. p. 3 (1911).

♂. Head black-brown; thorax orange; legs brown; abdomen orange, the terminal segments brown, the ventral surface brown, the ventral valve white tinged with yellow at sides at base. Fore wing hyaline, the veins and margins black-brown; the base orange, on inner area extending to before middle; the terminal brown line expanding into a large patch on apical area and a small patch at tornus. Hind wing hyaline, the veins and margins black, the extreme base with some yellow; the terminal black line expanding slightly towards apex; the underside with the base yellow, the upper extremity of cell filled in with black.

Hab. S. America, type † ♂ in Coll. Dognin. *Exp.* 24 millim.

*427 *d*. Loxophlebia fininigra. (Plate VI. fig. 27.)

Loxophlebia fininigra, Kaye, Entom. xliv. p. 145 (1911).

♂. Head black with two white points behind antennæ; thorax orange; pectus except below the wings and legs black, the coxæ with white patches; abdomen orange, the three terminal segments black suffused with silvery-blue, the ventral surface black, the valve white tinged with yellow at base of sides. Fore wing hyaline, the veins and margins black; the base orange, somewhat produced on inner area; a slight black discoidal lunule; the terminal band expanding widely on apical area and slightly below vein 2. Hind wing hyaline, the veins and margins black; some orange at base; the terminal band expanding on apical area and on inner area to near base.

Hab. Brazil, Santos, Guarujá (*Kaye*), type † ♂ in Coll. Kaye. *Exp.* 22 millim.

*427 *e*. Loxophlebia rufescens.

Loxophlebia rufescens, Roths. Nov. Zool. xviii. p. 29 (1911), & xx. p. 471, pl. xiv. f. 22.

♂. Head blackish; antennæ white towards tips; palpi white at base; frons white with black bar; thorax deep orange, the patagia with black outer edge; pectus and legs blackish, some white below shoulders, the fore coxæ white; abdomen deep orange, the basal segment brown with white subdorsal stripes and some white at sides, the ventral surface blackish, the ventral valve white edged by blackish. Fore wing hyaline, the veins and margins black; some orange at base extending as short streaks below costa and above inner margin; a narrow black discoidal bar conjoined to the costal area; the terminal band expanding widely on apical area and moderately below vein 2. Hind wing hyaline, the veins, margins, and inner area blackish; the hair on inner margin white; the terminal black band expanding somewhat towards apex; the underside with the cell and costal area blackish.

Hab. Venezuela, Caura R., Maripa (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

427 *f*. Loxophlebia flavipicta. (Plate VI. fig. 28.)

Loxophlebia flavipicta, Schaus, A. M. N. H. (8) ix. p. 34 (1912).

♂. Head black; frons white; white points behind antennæ; thorax orange-yellow; femora except at base, tibiæ except at extremities, and tarsi towards extremities black; abdomen yellow, a round dorsal black patch on 2nd and 3rd segments and the terminal segments black, both slightly tinged with blue-grey, the ventral surface yellow with the terminal segments black. Fore wing hyaline; the base yellow, bounded by a black line expanding into a spot on inner area; the costa and veins defining the cell on

medial area black, the inner margin yellow; the costa and veins of postmedial area to vein 3 yellow; a large apical black patch extending to vein 3 and a patch at tornus black, the termen between these points yellow. Hind wing hyaline; a black patch in end of cell and streak on vein 1 except at base; the inner margin and veins of postmedial area yellow; an apical black patch narrowing to a point at vein 2.

Hab. Costa Rica, Sixola R. (*Schaus*), 1 ♂. *Exp.* 24 millim.

429 *a*. **Loxophlebia cinctata.** (Plate VI. fig. 29.)

Loxophlebia cinctata, Hmpsn. A. M. N. H. (7) xv. p. 428 (1905).

♀. Head black; palpi in front, basal joint of antennæ in front, and gulæ yellow; frons white; thorax yellow, the patagia black except upper edge, a broad dorsal black stripe; abdomen yellow, a dorsal black stripe, the 2nd and 3rd segments with dorsal black bands, the three terminal segments blue-black. Fore wing hyaline, the veins and margins black; the base yellow, a yellow streak below costa to well beyond middle, veins 6, 5, 4 yellow from cell to the terminal black band which expands widely on apical area and slightly below vein 2; a black discoidal bar. Hind wing hyaline; the base yellow; the cell with black spot in extremity; the veins yellow from cell to the terminal black band which expands on apical area and on inner margin to near base.

Hab. Venezuela, Caura Valley (*Klages*), 2 ♀ type. *Exp.* 28 millim.

430 *a*. **Loxophlebia egregia.** (Plate VI. fig. 30.)

Loxophlebia egregia, Schaus, A. M. N. H. (8) vii. p. 174 (1911).

♀. Head black; frons with lateral white patches; thorax orange with black dorsal stripe; femora except towards base and tibiæ black, the tarsi with black stripes; abdomen orange with dorsal black stripe on three basal segments expanding into a triangular patch on 2nd segment, the extremity black with some grey on dorsum. Fore wing hyaline, the veins and margins black, the base orange; a black discoidal bar; the terminal black band expanding widely on apical area and below vein 2. Hind wing hyaline, the veins and margins black, the base orange; the terminal black band expanding slightly towards apex.

Hab. Costa Rica, Guapiles (*Schaus*), 1 ♀. *Exp.* 24 millim.

*431 *a*. **Loxophlebia chrysobasis.** (Plate VI. fig. 31.)

Loxophlebia chrysobasis, Dogn. Hét. Nouv. Am. Sud., v. p. 5 (1912).

♀. Head black; frons with white patch; palpi yellow at base; thorax orange-yellow with dorsal black stripe; the patagia black towards tips; femora at extremities and base of tibiæ black-brown;

abdomen orange-yellow with narrow dorsal black stripe, the three terminal segments black suffused with blue. Fore wing hyaline, the veins and margins black-brown; the base orange-yellow; a yellow streak below costa to beyond middle; a black discoidal bar; the terminal band expanding widely on apical area and slightly below vein 2. Hind wing hyaline, the veins and margins black; the base orange-yellow; the terminal band expanding towards apex; the underside with the costal area yellow to beyond middle.

Hab. Colombia, Medina (*Fassl*), type † ♀ in Coll. Dognin. *Exp.* 28 millim.

*432 *a*. Loxophlebia pheiodes. (Plate VI. fig. 32.)

Loxophlebia pheiodes, Dogn. Hét. Nouv. Am. Sud, vii. p. 5 (1914).

♂. Head and thorax black-brown; antennæ with some white above towards tips; palpi orange in front; patagia and metathorax with orange points; pectus and coxæ orange; legs streaked with yellow, the hind tibiæ and tarsi orange; abdomen black-brown with orange lateral bands meeting dorsally on 2nd and 3rd segments, the ventral surface orange-yellow. Fore wing hyaline, the veins and margins black-brown; a fine orange streak below costa to near apex; a narrow oblique black discoidal bar; the black on termen expanding towards apex. Hind wing hyaline, the veins and margins black. Underside of fore wing with the orange fascia extending to the costal edge on postmedial area.

Hab. Colombia, Bogotá (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 26 millim.

*433 *a*. Loxophlebia clagesi.

Loxophlebia klagesi, Roths. Nov. Zool. xviii. p. 29 (1911), & xx. p. 471, pl. xiv. f. 21.

♂. Head, thorax, and abdomen black-brown, the last with the terminal segments suffused with silvery blue; frons with two small white spots; antennæ white towards tips; patagia with orange patches; fore coxæ white; fore tarsi white in front except at extremity; abdomen with white subdorsal streaks on two basal segments, lateral white spots at base, small subdorsal orange spots on 4th segment, and the ventral valve white. Fore wing hyaline, the veins and margins rather widely black-brown; a narrow black discoidal bar conjoined to the costal area; the terminal band expanding widely on apical area and slightly below vein 2. Hind wing hyaline, the veins and margins black; the hair at base of inner area white; the terminal band expanding somewhat towards apex; the underside with the cell and costal area black-brown.

Hab. Trinidad; Venezuela; Surinam, Maroewym Valley, Aroewarwar Creek (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

434. Loxophlebia masa.

Abdomen of male with no ventral valve.

♂. Fore wing with the terminal band slightly expanding at apex and not expanding below vein 2; hind wing with the terminal band not expanding at apex.

Misantla in U.S. Nat. Mus.

*434 *a*. Loxophlebia crusmatica. (Plate VII. fig. 1.)

Loxophlebia crusmatica, Dogn. Hét. Nov. Am. Sud., ii. p. 5 (1911).

♂. Head and thorax black-brown; palpi white in front except the 3rd joint; frons with pair of white spots; shoulders with crimson patches; coxæ white in front, the fore tarsi with the 1st three joints white, the hind tibiæ and tarsi white on inner side; abdomen black-brown, the 1st three segments with subdorsal white patches, the terminal segments suffused with metallic blue, the ventral valve white. Fore wing hyaline, the veins and margins black-brown; the terminal band expanding very broadly on apical area and expanding below vein 2. Hind wing hyaline, the veins and margins black-brown, the terminal band expanding on apical area.

Hab. Fr. Guiana, St. Jean Maroni (*Le Moult*), type † ♂ in Coll. Dognin. *Exp.* 26 millim.

434 *b*. Loxophlebia davisi. (Plate VII. fig. 2.)

Loxophlebia davisi, Gibbs, Proc. Ent. Soc. 1913, p. iii.

♀. Head black with two white points behind antennæ; palpi at base and with a ring at base of 3rd joint white; frons slightly edged with white; thorax fulvous orange; pectus and legs black, the 1st joint of fore tarsi white, the hind coxæ with some white, and the femora with white streaks; abdomen black, the 1st segment with minute dorsal white point and streak, the ventral surface with slight oblique sublateral white streaks except towards extremity. Fore wing hyaline, the veins and margins black; some fulvous orange at base; the terminal band expanding widely on apical area and below vein 2. Hind wing hyaline, the veins and margins black, the terminal band expanding somewhat towards apex.

Hab. Br. Honduras, Belize R., Castille (*Davis*), 1 ♀ type. *Exp.* 22 millim.

434 *c*. Loxophlebia peralta. (Plate VII. fig. 3.)

Loxophlebia peralta, Schaus, A. M. N. H. (8) ix. p. 34 (1912).

♂. Head, thorax, and abdomen black-brown; the lower part of frons with white bar; white points behind antennæ; patagia with

large scarlet patches. Fore wing hyaline, the veins and margins black-brown, the base black-brown; a black-brown discoidal lunule; the terminal band expanding widely on apical area and slightly below vein 2. Hind wing hyaline, the veins and margins black-brown, the terminal band expanding on apical area.

Hab. Costa Rica, Tuis (*Schaus*), 1 ♂. *Exp.* 26 millim.

*434 *d*. **Loxophlebia socorrensis.** (Plate VII. fig. 4.)

Loxophlebia socorrensis, Dogn. Hét. Nouv. Am. Sud, ii. p. 4 (1911).

♂. Head and thorax black; antennæ with the shaft white above towards extremity; fore coxæ white in front, the tarsi white at base; abdomen black, shot with blue towards extremity, subdorsal white spots on 2nd segment, the ventral valve white except at base, the anal tuft yellow. Fore wing hyaline, the veins and margins black, the black on termen expanding slightly at apex, at veins 6, 5 which are approximated at extremities, and at vein 2. Hind wing hyaline, the veins and margins black, the inner area black, the black on termen expanding slightly at vein 6; the underside with the inner area pure white with black streaks along vein 1 and on base of inner margin.

Hab. Colombia, Monte Socorro, type † ♂ in Coll. Dognin. *Exp.* 26 millim.

*435 *a*. **Loxophlebia geminata.** (Plate VII. fig. 5.)

Loxophlebia geminata, Schaus, Pr. U.S. Nat. Mus. xxix. p. 185 (1905).

♂. Head, thorax, and abdomen black, the head and thorax slightly tinged with purple, the abdomen with green; palpi in front and sides of frons white; tegulæ with orange patches; coxæ white in front, fore femora streaked with white; abdomen with the ventral valve yellow; wings hyaline, the veins and margins black. Fore wing with the black expanding at base of costa and inner margin; a discoidal lunule; the terminal band expanding at apex and slightly at tornus. Hind wing with the cell black; the terminal band expanding at apex and slightly towards tornus.

Hab. Fr. Guiana, Maroni R., type † ♂ in Coll. Schaus. *Exp.* 20 millim.

*436 *a*. **Loxophlebia flavinigra.** (Plate VII. fig. 6.)

Loxophlebia flavinigra, D. Jones, Trans. Ent. Soc. 1908, p. 144.

♂. Head, thorax, and abdomen orange-yellow; palpi black except at base; antennæ black with some white towards tips; a dorsal black stripe on vertex of head, thorax, and abdomen; tegulæ black at tips; patagia with black stripe; tibiæ streaked with black, the tarsi black at extremities; abdomen with black lateral stripes on terminal segments, the anal tuft black with two

yellow points, the last two segments black below. Fore wing hyaline with the veins and margins black; an orange-yellow basal patch; a black discoidal spot; the terminal band expanding widely on apical area. Hind wing hyaline with the veins and margins black; the inner area black, the terminal band expanding on apical area.

Hab. Brazil, Castro Paraña, type † ♂ in Coll. D. Jones. *Exp.* 24 millim.

*436 *b*. **Loxophlebia multicincta.** (Plate VII. fig. 7.)

Loxophlebia multicincta, Dogn. Mém. Soc. Ent. Belg. xix. p. 121 (1912).

♀. Head and thorax black with some white scales, the pro- and mesothorax with paired yellow spots, the patagia with yellow streaks; palpi yellow, black at tips; gulæ yellow; antennæ with some white towards tips; throat and coxæ with yellow patches; legs streaked with white; abdomen black with a yellow band on each segment, the ventral surface yellowish white except at extremity. Fore wing hyaline, the veins and margins black; a yellow streak below costa to end of cell; the black on termen expanding at apex and slightly at vein 2. Hind wing hyaline, the veins and margins black; the black on termen expanding slightly at apex.

Hab. Colombia, Paso del Quidin, La Moral, type † ♀ in Coll. Dognin. *Exp.* 24 millim.

*436 *c*. **Loxophlebia nigricornis.** (Plate VII. fig. 8.)

Sphecosoma nigricornis, Rebel, Berl. Ent. Zeit. xlvi. p. 302 (1901).

♂. Head and thorax black-brown; patagia with orange patch at base; pectus with orange spots in front; femora with some orange hair; fore and mid tibiæ and tarsi below and hind tibiæ and tarsi orange; abdomen black-brown with lateral series of orange patches forming a dorsal band on 6th segment where they terminate, the ventral surface yellow. Wings hyaline, the veins and margins narrowly blackish; fore wing with the terminal line expanding into a narrow band between apex and vein 5; hind wing with the cell brown.

Hab. Colombia, Mediacion, type † ♂ in Coll. H.R.H. Princess Theresia of Bavaria, in very bad condition, Iragué. *Exp.* 28 millim.

*436 *d*. **Loxophlebia albicincta.** (Plate VII. fig. 9.)

Loxophlebia albicincta, Dogn. Ann. Soc. Ent. Belg. li. p. 223 (1907).

♂. Head and thorax black slightly mixed with grey; patagia with slight whitish streaks; metathorax with two white points;

fore coxæ white in front; legs black above, white below; abdomen black with dorsal white bar on 2nd segment, the following segments with narrow bands which are yellowish white above, white below. Fore wing hyaline, the veins and margins narrowly black; the base blackish tinged with yellow; two slight yellow streaks below base of costa; a small black spot at lower angle of cell; the terminal line expanding into a small spot between veins 6 and 5. Hind wing hyaline, the veins and margins narrowly black; the inner area with some black hair; the terminal line expanding into a small spot below vein 6.

Hab. Peru, Cuzco, type † ♂ in Coll. Dognin. *Exp.* 32 millim.

*440 *a*. **Mesothen perflava.** (Plate VII. fig. 10.)

Mesothen perflava, Kaye, Entom. xliv. p. 145 (1911).

♂. Head black, the frons and spots above the eyes white; gulæ yellow; palpi at base yellow; thorax yellow, the patagia above and a dorsal streak black, the shoulders with black marks; pectus yellow; legs yellow streaked with black; abdomen yellow, the two terminal segments black with subdorsal white spots on anal segment, the four basal segments with dorsal and subdorsal black streaks, the latter becoming lateral towards extremity, the ventral valve with a pair of black bars behind it. Fore wing hyaline, the veins and margins black; a slight yellow mark below base of costa and a yellow streak above base of inner margin; the black on termen expanding rather widely on apical area. Hind wing hyaline, the veins and margins black, the fringe of hair on inner margin yellow; the underside with the basal area yellow except the costa and vein 1.

Hab. Brazil, Santos, Alto do Serra (*D. Jones*), type † ♂ in Coll. D. Jones. *Exp.* 24 millim.

440 *b*. **Mesothen temperata.** (Plate VII. fig. 11.)

Mesothen temperata, Schaus, A. M. N. H. (8) vii. p. 174 (1911).

♂. Head black; palpi with white streaks at sides; thorax yellow, the tegulæ with black patches at base, the dorsum of thorax with black fascia and patch on metathorax; fore and mid legs blackish, the hind legs with the extremity of femora and base and extremity of tibiæ blackish; abdomen yellow with dorsal black patch on 2nd segment followed by a large patch on 3rd and 4th segments and the extremity black, the ventral surface black at base and extremity. Fore wing hyaline, the veins and margins black, the black on costal and inner margins expanding at base where there is some yellow between them; a yellow streak below middle of costa; a black discoidal lunule conjoined to the costal area; the terminal black band expanding widely on apical area and below vein 2. Hind wing hyaline, the veins and margins

black, the inner area black, the terminal band expanding on apical area.

Hab. Costa Rica, Juan Vinas (*Schaus*), 1 ♂. *Exp.* 30 millim.

440 *c*. **Mesothen dorsimacula.**

Mesothen dorsimacula, Roths. Nov. Zool. xviii. p. 45 (1911), and xix. p. 375, pl. iii. f. 32.

Head black, the frons with lateral white points above and below; thorax orange-yellow; pectus except just below the wings and the legs brown, the coxæ with white patches; abdomen orange-yellow with black-brown dorsal spot on two basal segments, the terminal segments black with some metallic blue at extremity. Fore wing hyaline, the veins and margins black-brown; the base yellow with some brown beyond it; a black-brown discoidal bar; the terminal band expanding very broadly on apical area and expanding below vein 2. Hind wing hyaline, the veins and margins black-brown; the terminal band expanding broadly on apical area.

Hab. Costa Rica, Juan Vinas (*Schaus*), 1 ♂, Guapiles (*Schaus*), 1 ♀, Tuis, 1 ♀, type † ♀ in Coll. Rothschild. *Exp.*, ♂ 30, ♀ 36 millim.

*440 *d*. **Mesothen bisexualis.** (Plate VII. fig. 12.)

Mesothen bisexualis, Dogn. Hét. Nouv. Am. Sud, v. p. 6 (1912).

♂. Head black; frons white; thorax yellow, the tips of tegulæ and a patch on prothorax black; legs black except towards base; abdomen yellow, the two terminal segments black with dorsal grey-blue bands. Fore wing hyaline, the veins and margins black; some yellow at base; the black on termen expanding widely on apical area and slightly below vein 2. Hind wing hyaline, the veins and margins black; some yellow at base; the black on termen expanding slightly towards apex.

♀. Fore wing with yellow streak below costa to beyond middle, the median nervure and base of vein 2 yellow, the inner margin yellow from middle to near tornus.

Hab. Colombia, Medina (*Fassl*), type † ♂ ♀ in Coll. Dognin. *Exp.* 26 millim.

*441 *a*. **Mesothen albilimbata.** (Plate VII. fig. 15.)

Mesothen albilimbata, Dogn. Hét. Nouv. Am. Sud, vi. p. 3 (1912).

♂. Head black, the frons and gulæ white; tegulæ and patagia orange edged with black; thorax black with orange streak on pro- and mesothorax and a white line across metathorax; legs orange-yellow, the fore legs with black bands on inner side; abdomen orange-yellow with black bands on four basal segments, the terminal segments black with white segmental lines, the

ventral surface orange-yellow with black sublateral spots on 4th and 5th segments and bands on the two following segments. Fore wing hyaline, the veins and margins narrowly black; a small orange-yellow spot at base and a streak below costa from before middle to near apex; the terminal black line expanding into a patch at apex. Hind wing hyaline, the veins and margins narrowly black.

Hab. Colombia, Monte Tolima (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 32 millim.

*442 *a*. **Mesothen aurata.** (Plate VII. fig. 16.)

Mesothen aurata, Dogn. Mém. Soc. Ent. Belg. xxii. p. 1 (1913).

♀. Head black, the frons white; thorax orange, the pro- and metathorax with black spots; the extremities of the tibiæ and the tarsi black; abdomen orange with dorsal series of black spots, small on basal and penultimate segments, sublateral spots on 4th, 5th, and 7th segments, and ventral bars on four basal segments. Fore wing hyaline, the veins and margins black; some orange at base; a narrow black discoidal bar conjoined to the costal area; the terminal band expanding widely on apical area and into a small dentate mark at vein 2. Hind wing hyaline, the veins and margins black; some orange at base of costa and the inner margin orange, the rest of the inner area occupied by a wedge-shaped black patch; the terminal band expanding slightly towards apex.

Hab. Colombia. Cañon del Tolima (*Fassl*), type † ♀ in Coll. Dognin. *Exp.* 22 millim.

442 *b*. **Mesothen occendeni.** (Plate VII. fig. 17.)

Mesothen ockendeni, Druce, A. M. N. H. (7) xv. p. 460 (1905).

Head black with white spots at sides of frons and base of antennæ; thorax and abdomen scarlet; shoulders and metathorax with black spots; pectus and legs black with some white at base of fore coxæ; abdomen with dorsal and lateral series of black spots, the extremity black. Fore wing hyaline, the veins and margins black; a small scarlet patch at base; the terminal band expanding widely at apex and tornus. Hind wing hyaline, the veins and margins black; the inner area broadly black, the margin fringed with scarlet hair; the terminal band expanding rather widely at apex.

Hab. S.E. Peru, St. Domingo, 5000 ft. (*Ockenden*), 2 ♂, 2 ♀, cotype. *Exp.* 42 millim.

*442 *c*. **Mesothen aurantiaca.** (Plate VII. fig. 18.)

Mesothen aurantiaca, Dogn. Ann. Soc. Ent. Belg. l. p. 178 (1906).

♀. Head black; frons, two spots on vertex of head, and tips of antennæ white; thorax and abdomen deep orange, pro- and meso-

thorax with black spots, patagia black at tips, fore legs black in front; abdomen with dorsal series of large black spots and lateral series of small spots, the three terminal segments black suffused with metallic blue. Fore wing hyaline, the veins and margins black; the base orange, emitting a short streak above inner margin and long fine streak below costa to near apex, a small black spot at base of costa; a black discoidal bar; the terminal band expanding widely on apical area and slightly at tornus. Hind wing hyaline, the veins and margins black; some orange at base of costa and inner margin; the inner area black; the terminal band expanding slightly towards apex.

Hab. S.E. Peru, Carabaya, St. Domingo, type † ♀ in Coll. Dognin. *Exp.* 36 millim.

*442 *d.* **Mesothen flavicostata.** (Plate VII. fig. 19.)

Mesothen flavicostata, Druce, A. M. N. H. (7) xviii. p. 77 (1906).

♂. Head, thorax, and abdomen orange; palpi and antennæ black, the latter with the shaft white towards tips; vertex of head with black point; shoulders, pro- and metathorax with black spots, the patagia with short black stripes; fore coxæ in front, the extremity of femora, and the tibiæ and tarsi above black, extremities of mid femora and the base and extremity of tibiæ and tarsi black; hind legs with the extremity of femora and base of tibiæ black; abdomen with dorsal and lateral series of black spots, the ventral valve with black spot at extremity and line beyond it, the end of abdomen blue-black. Fore wing hyaline, the veins and margins black; an orange streak below costa to well beyond middle and some orange at base; a slight black discoidal lunule; the terminal band expanding widely on apical area and slightly at tornus. Hind wing hyaline, the veins and margins black; the inner area black with a slight hyaline streak; the terminal line expanding into a patch on apical area.

Hab. Peru, St. Domingo (*Ockenden*), type † in Coll. Joicey. *Exp.* 32 millim.

442 *e.* **Mesothen nomia.** (Plate VII. fig. 20.)

Mesothen nomia, Druce, A. M. N. H. (7) v. p. 507 (1900).

♀. Head orange; antennæ black; tegulæ and patagia orange, the former black at base, the latter on outer side; thorax black with orange spots on meso- and metathorax; pectus with orange lateral patches; legs orange, coxæ black, the fore coxæ orange in front, femoro-tibial joints and hind tarsi above black; abdomen black with brilliant blue bands and broad orange bands on 2nd, 3rd, and 4th segments. Wings hyaline, the veins and margins black; fore wing with orange fascia below basal half of costa conjoined at base to a short streak above inner margin; the terminal band expanding on apical area and slightly at tornus; hind wing with orange streaks

on basal half of costa and above inner margin; the terminal band expanding slightly towards apex and at tornus.

Hab. Colombia, Valparaiso, 4500 ft. (*H. H. Smith*), type † ♀ in Coll. Joicey, Pacho (*Fassl*), 1 ♀. *Exp.* 36 millim.

*443 *a*. **Mesothen semiflava.**

Loxophlebia semiflava, Roths. Nov. Zool. xviii. p. 30 (1911), and xx. p. 471, pl. xiv. f. 33.

♂. Head and thorax blackish; frons white with a blackish bar; antennæ white at tips; patagia with yellow patches near base; fore coxæ white; abdomen orange-yellow with blackish dorsal and lateral marks on basal segment, the ventral valve brown defined by black. Fore wing hyaline, the veins and margins black; the base black; a narrow black discoidal bar conjoined to the black costa; the terminal band expanding moderately towards apex and slightly below vein 2. Hind wing hyaline, the veins and margins black, the terminal band expanding slightly towards apex; the underside with the cell and costal area black.

Hab. Venezuela, Caura R., Corosito (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

443 *b*. **Mesothen albifrons.** (Plate VII. fig. 13.)

Mesothen albifrons, Schaus, J. N.Y. Ent. Soc. ix. p. 41 (1901).

Head black, the frons white; thorax black, yellow at sides and below, the tarsi and parts of tibiæ black; abdomen yellow, the last four segments above, the last two below, black with a greyish tinge; wings hyaline, the veins and margins black. Fore wing with the terminal black band expanding widely on apical area and slightly towards tornus.

Hab. Colombia, type † ♂ in U.S. Nat. Mus. (*Fassl*), 1 ♀. *Exp.* 26 millim.

*443 *c*. **Mesothen ethela.** (Plate VII. fig. 14.)

Mesothen ethela, Schaus, A. M. N. H. (8) vii. p. 175 (1911).

♀. Head and thorax black-brown; frons white; patagia with white patches at base; fore and mid coxæ with white patches; mid and hind legs streaked with whitish on inner side; abdomen yellow, the extremity black. Fore wing hyaline, the veins and margins black-brown; a white point at base of cell; a black-brown discoidal bar conjoined to the costal area; the black on termen expanding widely on apical area and moderately below vein 2. Hind wing hyaline, the veins and margins black-brown, the black on termen expanding towards apex; the cell and inner area black.

Hab. Costa Rica, Sixola R. (*Schaus*), type † ♀ in U.S. Nat. Mus. *Exp.* 30 millim.

*443 *d.* Mesothen cosmosomoides.

Loxophlebia cosmosomoides, Roths. Nov. Zool. xviii. p. 30 (1911), and xx. p. 471, pl. xiv. f. 32.

♀. Head and thorax black; palpi yellow; shoulders with yellow patches, the metathorax with orange patch; fore coxæ white; legs yellow streaked with blackish; abdomen orange-yellow with broad black band on three penultimate segments, the ventral surface whitish towards base. Fore wing hyaline, the veins and margins black; the base black with a slight hyaline streak below costa; a narrow black discoidal lunule; veins 6 to 3 yellow on the hyaline area; the terminal black band expanding very widely on apical area and below vein 2. Hind wing hyaline, the veins, costa, and inner area yellow; a terminal black band expanding into a large patch on apical half; the underside with the cell and costal area to beyond middle yellow.

Hab. Surinam, Maroewyn Valley, Aroewarwar Creek (*Klages*), type † ♀ in Coll. Rothschild. *Exp.* 32 millim.

*443 *e.* Mesothen montana. (Plate VII. fig. 21.)

Mesothen montana, Schaus, A. M. N. H. (8) vii. p. 175 (1911).

♀. Head and thorax fuscous brown; legs yellow, the hind tibiæ except towards base and the tarsi black; abdomen yellow with subdorsal and sublateral series of black spots except on basal segments. Fore wing hyaline, the veins and margins fuscous black; a white point at base of costa; a black discoidal bar conjoined to the costal area; the black on termen expanding widely on apical area and slightly below vein 2. Hind wing hyaline, the veins and margins black; the black on termen expanding towards apex; the inner area black.

Hab. Costa Rica, Mt. Poas (*Schaus*), type † ♀ in U.S. Nat. Mus. *Exp.* 42 millim.

*443 *f.* Mesothen meridensis.

Cosmosoma meridense, Roths. Nov. Zool. xviii. p. 36 (1911), and xx. p. 470, pl. xiii. fig. 24.

♀. Head and thorax black; frons, a band on back of head, patches on tegulæ, streaks on patagia, and a pair of spots on metathorax yellow; palpi yellow except at base and tips; abdomen black with series of metallic blue bands and narrow yellow bands on 2nd and 3rd segments except on ventral surface. Fore wing hyaline, the veins and margins narrowly black; a yellow streak below basal half of costa; the black on termen expanding on apical area. Hind wing hyaline, the veins and margins black; the underside with the basal costal area yellow.

Hab. Venezuela, Merida (*Briceno*), type † ♀ in Coll. Rothschild. *Exp.* 34 millim.

*445 *a*. **Mesothen inconspicuata.** (Plate VII. fig. 22.)

Loxophlebia inconspicuata, Kaye, Entom. xliv. p. 145 (1911).

♀. Head black-brown, the frons edged with white; antennæ white towards tips; thorax orange; pectus and legs black-brown, the coxæ with white points, the tarsi white above at base; abdomen black-brown with a white line at base and sublateral white streaks except at extremity. Fore wing hyaline, the veins and margins black-brown expanding at base of costa and inner margin; a white point at base of costa with slight orange mark below it. Hind wing hyaline, the veins and margins black-brown; the basal and inner areas black-brown.

Hab. Br. Guiana, Potaro R. (*Roberts*), type † ♀ in Coll. Kaye. *Exp.* 20 millim.

*445 *b*. **Mesothen pyrrhina.** (Plate VII. fig. 23.)

Mesothen pyrrhina, D. Jones, Trans. Ent. Soc. 1914, ined. pl. i. f. 7.

♂. Head black, the antennæ with the shaft white above towards tips; palpi white at extremities of joints; thorax fulvous orange, the tegulæ slightly white at tips; pectus and legs black, the coxæ with white patches, the tarsi white at base; abdomen black with dorsal white point at base and subdorsal greyish streaks. Fore wing hyaline, the veins and margins black; a yellowish point at base; the terminal band expanding towards apex, where its inner edge is somewhat dentate, and below vein 2. Hind wing hyaline, the veins and margins black, the terminal band expanding somewhat towards apex.

♀. Fore wing with some black irroration in and beyond the cell and the streaks in discal and submedian folds more diffused, the terminal area with black streaks in the interspaces below veins 7 and 5.

Hab. Brazil, São Paulo, Aracatuba (*D. Jones*), type † ♂, Santos Guarujá, type † ♀ in Coll. D. Jones. *Exp.*, ♂ 22, ♀ 24 millim.

446 *a*. **Mesothen cæruleicorpus.** (Plate VII. fig. 24.)

Mesothen cæruleicorpus, Schaus, Pr. U.S. Nat. Mus. xxix. p. 185 (1905).

Head and thorax black-brown; palpi crimson at base; coxæ, femora, and tibiæ crimson; abdomen metallic blue; wings hyaline, the veins and margins black. Fore wing with black discoidal bar; the terminal band expanding widely at apex and moderately at tornus. Hind wing with the terminal band expanding into a patch at apex.

Hab. Colombia, Quindin, Rio Toche, 1 ♂; Bolivia, Yungas-la-Paz, 3000 ft., type † ♂ in U.S. Nat. Mus.; Peru, San Domingo (*Ockenden*), 2 ♂, 1 ♀. *Exp.* 32 millim.

*448 *a*. **Mesothen aurantegula.** (Plate VII. fig. 25.)

Loxophlebia aurantegula, D. Jones, Trans. Ent. Soc. 1914, ined. pl. i. f. 6.

♀. Head, thorax, and abdomen black-brown, the antennæ with some whitish towards tips, the tegulæ with orange patches; palpi with the joints finely defined by white. Fore wing hyaline, the veins and margins black; a black discoidal bar conjoined to the costal fascia; the terminal band expanding widely on apical area and below vein 2. Hind wing hyaline, the veins and margins black; the terminal band expanding somewhat towards apex.

Hab. Brazil, Santos, Guarujá (*D. Jones*), type † ♀ in Coll. D. Jones. *Exp.* 28 millim.

*448 *b*. **Mesothen nana.** (Plate VII fig. 26.)

Mesothen nanum, Schaus, Pr. U.S. Nat. Mus. xxix. p. 185 (1905).

♀. Head, thorax, and abdomen black, the last with a greenish tinge; frons with white spots at sides; shoulders with orange-red patches; wings hyaline, the veins and margins rather widely black. Fore wing with the black on inner margin expanding at base; a large triangular discoidal spot; the terminal band expanding widely on apical area and at tornus. Hind wing mostly black, leaving a hyaline patch beyond the cell between veins 7 and submedian fold.

Hab. Fr. Guiana, Maroni R., type † ♀ in U.S. Nat. Mus. *Exp.* 18 millim.

448 *c*. **Mesothen endoleuca.** (Plate VII. fig. 27.)

Mesothen endoleuca, Druce, A. M. N. H. (7) xv. p. 460 (1905).

Head, thorax, and abdomen black; palpi in front, frons, basal joint of antennæ in front, a line behind antennæ, some scales on edges of tegulæ, patagia, shoulders, and legs white; abdomen with broad greyish subdorsal fasciæ, the ventral valve of male slightly edged with white; wings hyaline, the veins and margins black. Fore wing with the base black, the terminal band expanding at apex and below vein 2. Hind wing with the inner area white below.

Hab. Venezuela, Caurà Valley (*Klages*), 1 ♂, 1 ♀. *Exp.* 22 millim.

449. **Mesothen desperata.**

Abdomen of male without ventral valve.

Fig. 20.—*Mesothen desperata*, ♂. ½.

451. Del. *Glaucopis hæmatica*, Perty, and *Læmocharis zantes*, H. S.; the species will stand as **Chrostosoma fenestrina**, Butl.

*452 *a*. Chrostosoma schausi.

Chrostosoma schausi, Roths. Nov. Zool. xviii. p. 30 (1911), & xx. p. 471, pl. xiv. f. 36.

♀. Head and thorax black, the vertex of head, tegulæ, dorsum of thorax, and legs suffused with brilliant metallic blue; shoulders with crimson spots; abdomen black, the basal segment with crimson dorsal patch and white spots at sides, the following segments with metallic blue subdorsal patches, the ventral surface with white bands on medial segments. Fore wing hyaline, the veins and margins black; the base black; a broad black discoidal band from costa to the terminal band at vein 2; the terminal band expanding into a large apical patch and widely below vein 2. Hind wing hyaline, the veins and margins black; the black on termen expanding into a patch on apical area and a somewhat dentate mark at vein 1.

Hab. Panama, Chiriqui, type † ♀ in Coll. Rothschild. *Exp.* 34 millim.

*453 *a*. Chrostosoma pellucida. (Plate VII. fig. 28.)

Chrostosoma pellucida, Schaus, Pr. U.S. Nat. Mus. xxix. p. 185 (1905).

♂. Head, thorax, and abdomen orange; palpi, antennæ, tips of patagia, greater part of legs, and terminal segment of abdomen black; wings hyaline, the veins and margins black. Fore wing with a little orange at base; the terminal band expanding rather widely at apex and slightly at tornus. Hind wing with the terminal band expanding at apex and into a tooth below vein 2.

Hab. Peru, Carabaya, type † ♂ in U.S. Nat. Mus. *Exp.* 30 millim.

*453 *b*. Chrostosoma mysia. (Plate VII. fig. 29.)

Mesothen mysia, Druce, A. M. N. H. (7) xviii. p. 77 (1906).

♂. Head black; thorax orange-yellow; legs black-brown; abdomen orange-yellow with series of black dorsal and ventral bands and lateral spots, the extremity black. Fore wing hyaline, the veins and margins black, the terminal band expanding widely on apical area and slightly at tornus. Hind wing hyaline, the veins and margins black, the inner margin rather more broadly, and the terminal line expanding on apical area.

Hab. Peru, La Oroya (*Ockenden*), type † in Coll. Joicey. *Exp.* 32 millim.

*453 *c*. Chrostosoma plagiata.

Gymnelia plagiata, Roths. Nov. Zool. xviii. p. 156 (1911), & xix. p. 377, pl. v. f. 33.

♂. Head, thorax, and abdomen black with a slight bluish gloss; abdomen with a dorsal yellow patch on three basal segments with a small dorsal black spot on 2nd segment, the ventral surface with the basal half yellow. Fore wing hyaline, the veins and margins black, the terminal band expanding on apical area. Hind wing hyaline, the veins and margins black, the terminal band expanding slightly towards apex and angled inwards below vein 2.

Hab. Peru, Carabaya, S. Domingo (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 32 millim.

455 *a*. Chrostosoma patricia. (Plate VII. fig. 30.)

Chrostosoma patricia, Schaus, A. M. N. H. (8) ix. p. 34 (1912).

♀. Head and thorax black; frons, vertex of head, tegulæ, and metathorax with metallic blue spots; shoulders with crimson spots; coxæ with white spots; abdomen black with pair of crimson spots at base, a lateral series of blue spots, the ventral surface white. Fore wing hyaline, the veins and margins black; a black patch at base; a rather broad black band at end of cell connected by a fascia on inner margin with the tornus; a quadrate terminal black patch from apex to vein 5. Hind wing hyaline, the veins and margins black; the terminal black band expanding widely on apical area and slightly towards tornus.

Hab. Costa Rica, Sitio (*Schaus*), 1 ♀. *Exp.* 34 millim.

*456 *a*. Chrostosoma rica. (Plate VII. fig. 31.)

Pheia rica, Dognin, Ann. Soc. Ent. Belg. xli. p. 24 (1897).

♂. Head, thorax, and abdomen black; frons, vertex of head, tegulæ, shoulders, and metathorax with patches of metallic blue; fore coxæ with white patches; abdomen with dorsal yellow patch on 1st segment and lateral spots on 2nd and 3rd segments, and subdorsal silvery blue patches on the other segments; wings hyaline, the veins, and margins rather narrowly, black. Fore wing with discoidal black lunule conjoined to the costa; the terminal band expanding at apex. Hind wing with the terminal band expanding at apex and towards tornus.

Hab. Ecuador, Loja, type † ♂ in Coll. Dognin. *Exp.* 32 millim.

*456 *b*. Chrostosoma viridipunctata.

Chrostosoma viridipunctatum, Roths. Nov. Zool. xviii. p. 30 (1911), & xx. p. 471, pl. xiv. f. 34.

♀. Head, thorax, and abdomen black-brown, the frons, tegulæ,

metathorax, and fore coxæ with some metallic blue, the patagia with crimson spots near base; abdomen with crimson spot at base of dorsum, lateral series of metallic blue patches and sublateral patches on basal segments. Fore wing hyaline, the veins and margins rather broadly black-brown; a broad black-brown discoidal band from the costa to the terminal band at vein 2; the terminal band expanding very widely on apical area and below vein 2. Hind wing hyaline, the veins and margins black-brown; the terminal band expanding into a patch on apical area and into conjoined somewhat dentate patches above and below vein 1; the underside with the cell except its lower extremity and the costal area black-brown.

Hab. Bolivia, Yungas-la-Paz (*Garlepp*), type † ♀ in Coll. Rothschild. *Exp.* 34 millim.

*463 *a*. Leucotmemis lemoulti.

Cosmosoma lemoulti, Roths. Nov. Zool. xviii. p. 156 (1911), & xix. p. 377, pl. v. f. 32.

♂. Head and thorax black-brown; palpi yellow at base and in front; frons white; shoulders and metathorax with orange patches; pectus and legs yellow, the femora, fore tibiæ, and the tarsi tinged with brown; abdomen orange, the two terminal segments black-brown leaving the extremity orange, the terminal segment with small metallic blue lateral spots, the ventral surface yellow with brown bands on the two terminal segments. Fore wing black-brown; a wedge-shaped hyaline patch in cell, an elongate patch below the cell, and a postmedial patch from below costa to above vein 2; the veins crossing these patches yellow; some orange-yellow above antemedial part of inner margin. Hind wing with the basal half orange-yellow; a hyaline patch beyond the cell from below costa to vein 2, the veins crossing it yellow; a terminal black-brown band expanding towards apex and below vein 2.

Hab. Fr. Guiana, Nouveau Chantier (*Le Moult*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

*467 *a*. Leucotmemis endochrysa. (Plate VII. fig. 32.)

Leucotmemis endochrysa, Dogn. Hét. Nouv. Am. Sud, iii. p. 4 (1911).

♂. Head and thorax black-brown; palpi yellow; frons with white bar above; shoulders with yellow patches; metathorax orange; legs orange-yellow, tinged with brown towards base; abdomen orange with broad black dorsal and lateral band on subterminal segment. Fore wing hyaline, the veins and margins black-brown, the postmedial area with veins 6 to 3 yellow; the basal area black-brown with yellow mark on base of costa; the terminal black-brown band expanding widely on apical area and below vein 2. Hind wing hyaline, the veins yellow, the inner area

orange; the apical area black-brown with a narrow terminal black-brown band from it to vein 1; the underside with the cell except lower extremity and the costal area to beyond middle yellow.

Hab. Fr. Guiana, St. Jean Maroni (*Le Moult*), type † ♂ in Coll. Dognin. *Exp.* 34 millim.

470. **Leucotmemis emergens**, insert (syn.) :—

Leucotmemis felderi, Roths. Nov. Zool. xviii. p. 30 (1911), & xx. p. 471, pl. xiv. f. 35.

Brazil, Amazons, type † ♀ *felderi* in Coll. Rothschild.

*472 *a*. **Leucotmemis hoffmannsi.**

Calonotos hoffmannsi, Roths. Nov. Zool. xviii. p. 40 (1911), & xx. p. 470, pl. xiii. f. 36.

♀. Head and thorax dark brown, the frons suffused with metallic blue; antennæ with the shaft white above towards tips; tegulæ and shoulders with white spots; metathorax with metallic blue spot; abdomen dark brown with subdorsal and sublateral metallic green stripes. Fore wing dark brown with an elongate hyaline spot below middle of cell with slight streak below it; minute spots above and below vein 6 and elongate spots above and below vein 4. Hind wing dark brown with an elongate hyaline spot below the cell and a spot beyond the cell bisected by the discal fold.

Hab. Brazil, Amazons, Itaituba (*Hoffmanns*), type † ♀ in Coll. Rothschild. *Exp.* 38 millim.

*473 *a*. **Leucotmemis thoracica.** (Plate VIII. fig. 1.)

Leucotmemis thoracica, Schaus, Pr. U.S. Nat. Mus. xxix. p. 186 (1905).

♀. Head black with metallic blue patch on frons and vertex of head; antennæ white at tips; thorax orange; tegulæ black in front with slight white spots; patagia black at shoulders; pro- and metathorax with white spots; pectus and legs black with some orange and blue on sides of coxæ and pectus; abdomen black with orange subdorsal streaks on 1st segment and dorsal and lateral series of greenish blue spots; wings hyaline, the veins, and margins rather widely, black. Fore wing with the black on costa and inner margin expanding at base; a rounded discoidal spot conjoined to the costal area and emitting a diffused streak in cell; the terminal band expanding widely on apical area and very slightly at tornus. Hind wing with the cell black; the terminal band expanding towards apex and slightly angled inwards in submedian fold.

Hab. Fr. Guiana, Maroni R., type † ♀ in U.S. Nat. Mus. *Exp.* 34 millim.

*473 *b*. Leucotmemis albigutta. (Plate VIII. fig. 2.)

Leucotmemis albigutta, Schaus, Pr. U.S. Nat. Mus. xxix. p. 185 (1905).

♀. Head, thorax, and abdomen black; frons with metallic blue patch; tegulæ, patagia, pro- and metathorax with bluish white spots; fore coxæ crimson behind, fore coxæ in front and pectus at sides with some metallic blue; abdomen with dorsal and lateral greenish blue fasciæ; wings hyaline, the veins, and margins rather widely, black. Fore wing with the black on costa and inner margin expanding at base; a semicircular black discoidal patch conjoined to the costal area and emitting a slight streak in cell; the terminal band expanding widely on apical area and slightly at tornus. Hind wing with the cell black; the terminal band expanding on apical area.

Hab. Surinam, Geldersland, type † ♀ in U.S. Nat. Mus. *Exp.* 36 millim.

*475 *a*. Cosmosoma brincleyi.

Cosmosoma brinkleyi, Roths. Nov. Zool. xviii. p. 31 (1911), & xx. p. 471, pl. xiv. f. 29.

♀. Head and tegulæ black; frons and vertex of head with metallic blue patches; antennæ white at tips; thorax scarlet, the patagia with black outer edge, the metathorax with metallic blue patch; extremities of femora and the tibiæ and tarsi blackish; abdomen scarlet with dorsal black fascia expanding into triangular patches with metallic blue spots on them, and segmental lines except towards base expanding into lateral blue and black spots, the two terminal segments black with dorsal and lateral blue spots, sublateral black streaks except towards base and slight ventral blackish bars. Hind wing hyaline, the veins and margins black; some scarlet at base; a narrow black discoidal bar conjoined to the costal area; the terminal band expanding into a large patch on apical area. Hind wing hyaline, the veins and margins black; some scarlet at base; the terminal band expanding towards apex; the underside with the cell except the lower extremity and the costal area black.

Hab. Colombia, Caura, Coreato (*Brinckley*), type † ♀ in Coll. Rothschild. *Exp.* 44 millim.

*475 *b*. Cosmosoma oroyana.

Cosmosoma oroyanum, Roths. Nov. Zool. xviii. p. 31 (1911), & xx. p. 471, pl. xiv. f. 31.

♂. Head and tegulæ black; frons, tegulæ, and shoulders with metallic blue spots; antennæ white at tips; thorax scarlet, the outer edge of patagia black; pectus with black-brown patches in front; legs black-brown; abdomen black with broad lateral scarlet stripes on four basal segments, a dorsal series of metallic blue

spots, the terminal segments with lateral blue spots, the ventral valve with white patches at sides and yellow band behind it. Fore wing hyaline, the veins, and margins rather broadly, blackish; the terminal band expanding broadly on apical area and slightly below vein 2. Hind wing hyaline, the veins and margins blackish, the terminal band expanding somewhat towards apex.

Hab. Peru, R. Inambare, La Oroya (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 38 millim.

*475 *c.* Cosmosoma pyrsonota, n. n.

Cosmosoma mathani, Roths. Nov. Zool. xviii. p. 31 (1911), & xx. p. 471, pl. xiv. f. 37 (nec Roths. 1910).

♀. Head black, the frons and vertex suffused with brilliant metallic blue; antennæ white at tips; thorax crimson, the outer edge of patagia dark brown; pectus and legs dark brown, the coxæ crimson; abdomen black-brown, the basal segment with subdorsal crimson spots, the following segments with subdorsal silvery blue spots and the terminal segments dorsally suffused with silvery blue. Fore wing hyaline, the veins and margins rather broadly black-brown, the costal area tinged with blue; a crimson point at base; a black-brown discoidal spot conjoined to the costal area; the terminal band expanding very widely on apical area and slightly below vein 2. Hind wing hyaline, the veins and margins black-brown; the terminal band expanding on apical area and into a somewhat dentate patch at vein 1; the underside with the cell and costal area brown.

Hab. Colombia, Cundinamarca, La Palma (*M. de Mathan*), type † ♀ in Coll. Rothschild. *Exp.* 36 millim.

*476 *a.* Cosmosoma entella. (Plate VIII. fig. 3.)

Cosmosoma entella, Druce, A. M. N. H. (7) iii. p. 229 (1899).

♂. Head and tegulæ black with patches of metallic blue on frons, vertex, and tegulæ; thorax crimson, the patagia edged with black, a black and blue spot on mesothorax; legs scarlet streaked with black; abdomen black with large lateral scarlet patches except on last two segments leaving a dorsal series of triangular black marks with blue spots on them and a lateral series of blue spots; the terminal half of ventral valve white. Fore wing hyaline, the veins and margins black; a crimson patch below base of costa and short streak on vein 1; the terminal band expanding very widely on apical area and slightly at tornus. Hind wing hyaline, the veins and margins black; slight crimson marks at base; the terminal band expanding towards apex and slightly towards tornus.

Hab. Ecuador, Balsampamba, type † ♂ in Coll. Joicey. *Exp.* 44 millim.

477 *a*. **Cosmosoma myrodora.** (Plate VIII. fig. 4.)

Cosmosoma myrodora, Dyar, J. N.Y. Ent. Soc. xv. p. 226 (1907).

Head black-brown with some metallic blue on frons and vertex of head, the tips of antennæ white; thorax scarlet with some black and blue on tegulæ and shoulders, the outer edge of patagia with black streak; abdomen black-brown with the 1st segment and broad subdorsal fasciæ on four basal segments scarlet, a dorsal series of blue spots and subdorsal spots on terminal segment, the ventral surface black-brown with white lateral spots on the valve of male. Fore wing hyaline with the veins and margins brown, the terminal band expanding widely on apical area. Hind wing hyaline, the veins and margins brown, the terminal band expanding somewhat towards apex and tornus.

Hab. U.S.A., Florida, Haulover, 1 ♂, 1 ♀, Indian R., Palm Beach, Miami. *Exp.*, ♂ 38, ♀ 44 millim.

478. **Cosmosoma sectinota**, insert (syn.):—

Cosmosoma rubrobasalis, Lathy, Entom. xxxii. p. 116 (1899).

*478 *a*. **Cosmosoma rubritarsis.** (Plate VIII. fig. 5.)

Cosmosoma rubritarsis, Schaus, A. M. N. H. (8) vii. p. 176 (1911).

♀. Head and thorax black, the vertex of head with some metallic blue, the tegulæ and shoulders with metallic blue spots; pectus below and legs to near extremity of femora crimson, the tarsi streaked with crimson; abdomen black, the basal segment with crimson spot at sides, the next four segments crimson with dorsal and lateral series of triangular black spots and the ventral surface black, the extremity with some metallic blue. Fore wing hyaline, the veins and margins black; a black discoidal lunule conjoined to the costal area; the terminal black band expanding widely on apical area and moderately below vein 2. Hind wing hyaline, the veins and margins black, the terminal band expanding somewhat towards apex.

Hab. Costa Rica, Guapiles (*Schaus*), type † ♀ in U.S. Nat. Mus. *Exp.* 42 millim.

*480 *a*. **Cosmosoma mathani.** (Plate VIII. fig. 6.)

Cosmosoma mathani, Roths. A. M. N. H. (8) v. p. 507 (1910).

♂. Head and thorax black glossed with blue, the frons, vertex of head, tegulæ at middle, and patagia at base with metallic blue spots, the metathorax with metallic blue streak; antennæ white at tips; coxæ and base of femora orange-yellow; abdomen orange-yellow, the basal segment and three terminal segments black, a dorsal series of metallic blue spots, lateral series of blue spots obsolescent on the yellow segments, the ventral valve white. Fore

wing hyaline, the veins and margins black, the terminal band expanding widely on apical area and slightly angled inwards at vein 2. Hind wing hyaline, the veins and margins black, the terminal band expanding somewhat towards apex.

Hab. Colombia, Cundinamarca (*M. de Mathan*), type † ♂ in Coll. Rothschild. *Exp.* 42 millim.

*480 *b*. **Cosmosoma basistiba.** (Plate VIII. fig. 7.)

Cosmosoma basistiba, Dogn. Hét. Nouv. Am. Sud, vii. p. 7 (1914).

♀. Head and thorax black-brown, the shoulders, metathorax, fore coxæ, and pectus behind with metallic blue spots; abdomen with the four basal segments orange-yellow with dorsal black mark on basal segment, the terminal segments black-brown with metallic-blue patches. Fore wing hyaline, the veins and margins black; a metallic blue point at base; a black discoidal lunule conjoined to the costal fascia; the black on termen expanding widely on apical area, and slightly below vein 2. Hind wing hyaline, the veins, margins, and inner area black, the black on termen expanding towards apex; the underside with some metallic blue in cell.

Hab. Colombia, Muzo (*Fassl*), type † ♀ in Coll. Dognin. *Exp.* 42 millim.

480 *c*. **Cosmosoma galatea.** (Plate VIII. fig. 8.)

Cosmosoma galatea, Schaus, A. M. N. H. (8) ix. p. 35 (1912).

Head and thorax black; frons white; vertex of head, tegulæ, and patagia with pairs of white points; pectus in front and fore coxæ with some white, the hind coxæ and pectus below fore wings with small white spots; abdomen yellow, the terminal segments black. Fore wing hyaline, the base, margins, and veins black; the terminal band expanding widely on apical area and angled inwards on vein 2. Hind wing hyaline, the veins, cell, costa, and inner area black; the termen black, expanding somewhat towards apex.

Hab. Costa Rica, Juan Vinas (*Schaus*), 2 ♂, 5 ♀, Tuis (*Schaus*), 1 ♀, Sitio (*Schaus*), 1 ♀, Guapiles (*Schaus*), 1 ♂. *Exp.* 32 millim.

*481 *a*. **Cosmosoma flavothorax.**

Cosmosoma flavothorax, Roths. A. M. N. H. (8) v. p. 507 (1910), & Nov Zool. xx. p. 470, pl. xiii. f. 2.

♂. Head, tegulæ, and patagia dark brown, dorsum of thorax yellow; frons, vertex of head, and shoulders with metallic blue spots; pectus orange-yellow; legs dark brown, yellow towards base; abdomen yellow, the four terminal segments black-brown with dorsal and lateral metallic blue spots, the ventral surface dark brown, yellow at extreme base, the ventral valve white at sides and

with white line behind it. Fore wing hyaline, the veins and margins rather broadly dark brown; a slight discoidal lunule; the terminal band expanding widely on apical area. Hind wing hyaline, the veins and margins dark brown; the terminal band expanding on apical area; the underside with the costal area and upper part of cell dark brown.

Hab. Ignotus; type † ♂ in Coll. Rothschild. *Exp.* 44 millim.

*481 *b*. **Cosmosoma intensa.**

Cosmosoma intensa, Roths. A. M. N. H. (8) v. p. 507 (1910), & Nov. Zool. xx. p. 470, pl. xiii. f. 3.

♂. Head, tegulæ, and outer edge of patagia black, the rest of patagia and dorsum of thorax yellow; frons, tegulæ, and shoulders with metallic blue spots; pectus orange-yellow; legs dark brown, the femora yellow behind; abdomen orange-yellow, the two terminal segments black with dorsal and lateral metallic blue spots, the ventral surface dark brown, yellow at extreme base, the ventral valve white at sides. Fore wing hyaline, the veins, and margins rather broadly, black-brown; a black discoidal lunule; the terminal band expanding widely on apical area and slightly below vein 2. Hind wing hyaline, the veins, margins, and inner area black-brown; the terminal band expanding towards apex; the underside with whitish streak in upper part of cell.

Hab. Colombia, Cundinamarca, Cananche; Ecuador, Paramba, type † ♂ in Coll. Rothschild. *Exp.* 46 millim.

*481 *c*. **Cosmosoma sitiona.** (Plate VIII. fig. 9.)

Chrostosoma sitiona, Schaus, A. M. N. H. (8) vii. p. 175 (1911).

♂. Head black; thorax yellow, the legs black; abdomen yellow with the two terminal segments black. Fore wing hyaline, the veins and margins black, the extreme base yellow; the terminal black band expanding very widely on apical area, leaving a small hyaline spot above base of vein 6 and with sinuous inner edge, expanding slightly below vein 2. Hind wing hyaline, the veins and margins black, the black on termen expanding widely on apical area; the very small inner area black.

Hab. Costa Rica, Sitio (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 30 millim.

*481 *d*. **Cosmosoma albifrons.** (Plate VIII. fig. 10.)

Cosmosoma albifrons, Dogn. Mém. Soc. Ent. Belg. xxii. p. 1 (1913).

♂. Head, thorax, and abdomen orange; frons white; antennæ and palpi black; legs except basal half of femora black; the extremity of abdomen black. Fore wing hyaline, the veins and margins black; some orange at base; the terminal band expanding widely on apical area and slightly below vein 2. Hind wing

hyaline, the veins and margins black; the extreme base yellow; the terminal band expanding widely on apical area.

Hab. Panama, Lino (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 30 millim.

*481 *e*. Cosmosoma notostiba, n. n. (Plate VIII. fig. 11.)

Cosmosoma notosticta, Dogn. Mém. Soc. Ent. Belg. xxii. p. 2 (1913), nec Dogn. 1909.

♂. Head and thorax orange; antennæ black, the shaft white above towards tips; palpi black; shoulders, pro- and metathorax with black spots; fore and mid femora towards extemities and the tibiæ and tarsi above black, the extremities of hind femora and the tibiæ at base black; abdomen orange with dorsal series of black spots and the extremity black, lateral and sublateral series of black spots, the ventral valve with black bar near extremity followed by two spots on the next segment. Fore wing hyaline, the veins and margins black; the base orange; an orange streak below costa and a streak on inner margin to towards termen; a narrow black discoidal lunule; the terminal band expanding widely on apical area and slightly below vein 2. Hind wing hyaline, the veins, margins, and inner area black; the extreme base orange; the terminal band expanding towards apex.

Hab. Colombia, Cañon del Tolima (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 30 millim.

*482 *a*. Cosmosoma garleppi.

Cosmosoma garleppi, Roths. Nov. Zool. xviii. p. 31 (1911), & xx. p. 471, pl. xiv. f. 30.

♀. Head and tegulæ black; frons with slight white spots at sides and some metallic blue below; antennæ white at tips; thorax orange-yellow, the outer edge of patagia black; femora at extremity, tibiæ, and tarsi blackish; abdomen black with subdorsal series of yellow patches except on two terminal segments which are suffused with metallic blue. Fore wing hyaline, the veins and margins rather broadly black; the base black; a black discoidal spot conjoined to the costal area; the terminal band expanding very widely on apical area and somewhat at vein 2. Hind wing hyaline, the veins, margins, and inner area black; the terminal band expanding towards apex; the underside with the cell and costal area black.

Hab. Bolivia, Yungas de Coroico (*Garlepp*), type † ♀ in Coll. Rothschild. *Exp.* 52 millim.

482 *b*. Cosmosoma rubriscapulæ.

Cosmosoma rubriscapulæ, Kaye, Trans. Ent. Soc. 1901, p. 116, pl. v. f. 9.

Black; frons with metallic blue patch; tegulæ and patagia scarlet, the latter with some black at base and on upper edge and a

blue spot on shoulders; coxæ with blue patches; abdomen with slight scarlet subdorsal marks on 1st segment, the other segments with dorsal metallic blue points, large subdorsal patches and some sublateral spots. Fore wing hyaline; a scarlet spot at base of inner margin; the veins black; the margins broadly black; a discoidal spot; the terminal band expanding widely on apical area and dentate at vein 2. Hind wing hyaline; the veins and inner area black; the terminal band expanding widely on apical area.

Hab. Trinidad (*Kaye*), 1 ♂, 1 ♀ type. *Exp.* 46 millim.

482 *c*. Cosmosoma melathoracia.

Cosmosoma melathoracia, Kaye, Trans. Ent. Soc. 1901, p. 115, pl. v. f. 10.

♀. Black; antennæ whitish at tips; vertex of head, tegulæ, and shoulders with metallic blue spots; coxæ and base of femora scarlet; abdomen with scarlet subdorsal streaks on 1st segment; a dorsal series of blue spots and subdorsal points on the two terminal segments. Fore wing hyaline; the veins and margins black; a black discoidal spot; the terminal band expanding widely on apical area. Hind wing hyaline; the veins and margins black; the terminal band expanding on apical area, and dentate at vein 1.

Hab. Trinidad, Tabaquite (*Kaye*), 1 ♀ type. *Exp.* 42 millim.

487 *a*. **Cosmosoma flavicornis**, Druce, trans. from *Gymnelia*, no. 395.

*502 *a*. Cosmosoma pytna. (Plate VIII. fig. 12.)

Cosmosoma pytna, Druce, A. M. N. H. (7) xviii. p. 78 (1906).

♂. Head and thorax black; palpi with the 1st joint and the 2nd in front orange; frons orange; back of head with paired blue spots; tegulæ orange with black spot; patagia broadly edged with orange above; metathorax orange with slight blue dorsal streak; pectus and base of legs orange; abdomen black, the basal and 4th and 5th segments orange, the black segments with subdorsal metallic blue spots, the ventral surface orange, the three terminal segments black with sublateral blue points on penultimate segment. Fore wing hyaline, the veins and margins rather widely black; a blue spot at base; an orange streak below costa to beyond middle and two short streaks above base of inner margin; the terminal band expanding widely on apical area and slightly at tornus. Hind wing hyaline, the veins and margins rather widely black; the costa and cell orange to beyond middle; some orange on inner area near base; the terminal band expanding on apical area.

Hab. Trinidad, Caparo (*Birch*), type † in Coll. Joicey. *Exp.* 38 millim.

*502 *b*. Cosmosoma bella. (Plate VIII. fig. 13.)

Leucotmemis bella, Kaye, Entom. xliv. p. 144 (1911).

♂. Head black, the vertex with some metallic blue; frons white at sides; patagia slightly edged with black, a slight black dorsal streak, broader and with some metallic blue on it on metathorax; tibiæ black, except at base, the tarsi black, the mid and hind tarsi whitish at extremities; abdomen orange with dorsal black streak formed of wedge-shaped marks, the mark on 2nd segment with some metallic blue, subdorsal black and blue spots on 2nd segment, the three terminal segments black with dorsal and subdorsal blue spots and band on terminal segment. Fore wing hyaline, the veins and margins black; an orange streak below costa to beyond middle and the basal inner area orange; a slight black discoidal lunule; a terminal black-brown band expanding widely on apical area and slightly below vein 2. Hind wing hyaline, the veins and margins black; some orange at base of inner margin; the terminal black band expanding on apical area and on inner area to before middle.

Hab. Brazil, Santos, Alta da Serra (*Kaye*), type † ♂ in Coll. Kaye. *Exp.* 30 millim.

*502 *c*. Cosmosoma cinctuta. (Plate VIII. fig. 14.)

Cosmosoma cinctuta, Schaus, A. M. N. H. (8) vii. p. 176 (1911).

♀. Head and thorax black; frons white at sides, the vertex of head with metallic blue patch; tegulæ and patagia with orange patches, the mesothorax with slight paired orange streaks, the metathorax with blue patch; pectus and legs yellow, the femora and fore tibiæ at base with brown streaks, the fore and mid tarsi brown except at base, the extremity of hind tibiæ and the tarsi brown; abdomen black, the basal segment orange with dorsal black streak, the 4th segment with small orange subdorsal spot, dorsal metallic blue spots on terminal segments and lateral and sublateral series. Fore wing hyaline, the veins and margins black; an orange streak below costa to well beyond middle and some orange on basal inner area; the black on termen expanding widely at apex and slightly below vein 2. Hind wing hyaline, the veins and margins black; some orange at base; the black on termen expanding slightly towards apex and widely on inner area; the underside with the costal area to beyond middle and the cell orange defined on outer side by black, the inner area orange to beyond middle.

Hab. Costa Rica, Juan Vinas (*Schaus*), type † ♀ in U.S. Nat. Mus. *Exp.* 32 millim.

507 *a*. Cosmosoma apennina. (Plate VIII. fig. 15.)

Cosmosoma apennina, Druce, A. M. N. H. (7) xv. p. 460 (1905).

Head black; frons white with black spot; palpi at base and gulæ orange; thorax orange, the patagia above and at extremity and spots on pro-, meso-, and metathorax black; legs black and orange;

abdomen orange with dorsal and ventral black bands and lateral spots, the extremity black. Fore wing hyaline, the veins and margins black; a small orange patch at base and slight streak below basal part of costa; the postmedial part of costa orange; orange streaks on vein 6, in discal fold, and on vein 5 from just beyond cell and on terminal parts of veins 4, 3; the terminal band expanding widely at apex and slightly at tornus. Hind wing hyaline, the veins and margins black; a little orange at base and the hair on inner margin orange; the terminal line expanding into a moderate apical patch.

Hab. S.E. Peru, St. Domingo, 6000 ft. (*Ockenden*), 5 ♂ cotype. *Exp.* 30 millim.

*507 *b*. Cosmosoma venata.

Cosmosoma venatum, Roths. Nov. Zool. xviii. p. 34 (1911), & xx. p. 472, pl. xiv. f. 49.

♀. Head black, the frons white with black spot at middle; thorax orange-yellow, the patagia black in front and above, the pro-, meso-, and metathorax with black spots connected by a streak; pectus and mid coxæ with black spots, the femora and tibiæ with black streaks and the tarsi black towards extremities; abdomen orange-yellow with dorsal series of black bars and lateral series of spots, the anal tuft black. Fore wing hyaline; the base yellow; the veins and margins black on basal half, yellow on terminal half; the termen black, yellow between veins 3 and 2, the black expanding into a large patch on apical area and small patch at tornus. Hind wing hyaline, the veins and margins black; the base and hair on inner margin yellow; the black on termen expanding into an apical patch; the underside with the costa yellow with a short black streak near base.

Hab. Peru, Carabaya, St. Domingo (*Ockenden*), type † ♀ in Coll. Rothschild. *Exp.* 30 millim.

*510 *a*. Cosmosoma doris.

Mesothen doris, Druce, A. M. N. H. (8) viii. p. 138 (July 1911).
Gymnelia plumosa, Roths. Nov. Zool. xviii. p. 156 (Sept. 1911), & xix. p. 377, pl. v. f. 8.

♂. Head, thorax, and abdomen orange-yellow; antennæ blackish; palpi blackish at tips; abdomen with dorsal series of black bars and lateral series of small spots. Fore wing hyaline, the veins and margins narrowly black; a yellowish streak below costa and a triangular orange-yellow patch at base of inner area. Hind wing hyaline, the veins and margins narrowly black; some yellow on basal costal area and in cell; the inner area yellow at base, then blackish.

Hab. Colombia, Monte del Edna, type † ♂ in Coll. Joicey, Cañon del Tolima (*Fassl*), type † ♂ *plumosa* in Coll. Rothschild. *Exp.* 36 millim.

510 *b*. Cosmosoma vespoides. (Plate IX. fig. 6.)

Pœcilosoma vespoides, Schaus, Pr. U.S. Nat. Mus. xxix. p. 186 (1905).

♂. Head, thorax, and abdomen orange; palpi at tips, antennæ, a patch on back of head, tegulæ, and patagia in front and the latter at tips black; pro- and metathorax with paired black spots; pectus and legs black and orange; abdomen with segmental black bands expanding into lateral spots; wings hyaline, the veins and margins narrowly black. Fore wing with orange streak below costa to beyond middle and some orange at base of inner margin; the terminal band expanding slightly at apex and tornus. Hind wing with the black expanding slightly at apex; the inner area black; the underside with the base orange.

Hab. Peru, Carabaya, type † ♂ in U.S. Nat. Mus., La Oroya (*Ockenden*), 1 ♂. *Exp.* 28 millim.

*510 *c*. Cosmosoma citrina.

Cosmosoma citrinum, Roths. Nov. Zool. xviii. p. 34 (1911), & xx. p. 470, pl. xiii. f. 7.

♀. Head dark brown; palpi at base and gulæ yellow; frons white at sides; thorax pale yellow with dark brown spots on pro- and metathorax and shoulders; tibiæ and tarsi suffused with brown; abdomen pale yellow with dorsal series of dark brown spots, the ventral surface with brown lines on medial segments. Fore wing hyaline, the veins and margins brown; the base pale yellow with irregular outer edge; the terminal band expanding widely on apical area. Hind wing hyaline, the veins, margins, and inner area brown; the extreme base yellow; the terminal band expanding somewhat on apical area; the underside with the base of cell and costal area and basal half of inner margin pale yellow.

Hab. Ignotus; type † ♀ in Coll. Rothschild. *Exp.* 42 millim.

*514 *a*. Cosmosoma galbana. (Plate VIII. fig. 16.)

Cosmosoma galbana, Schaus, A. M. N. H. (8) ix. p. 35 (1912).

♂. Head black; thorax yellow, the legs fuscous brown; abdomen yellow, the extremity black. Fore wing hyaline, the veins and margins black; the extreme base yellow; the terminal band expanding widely on apical area and below vein 2. Hind wing hyaline, the veins and margins black; the terminal band expanding on apical area.

Hab. Costa Rica, Juan Vinas (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 34 millim.

514 *b*. Cosmosoma thiacia, n. n. (Plate VIII. fig. 17.)

Cosmosoma thia, Schaus, A. M. N. H. (8) ix. p. 35 (1912), nec Druce (1899).

Head and thorax black; abdomen yellow with the two terminal

segments black. Fore wing hyaline, the veins and margins black; a black discoidal lunule conjoined to the costal fascia; the terminal band expanding widely on apical area and moderately below vein 2. Hind wing hyaline, the veins and margins black; the inner area black; a black apical patch.

Hab. Costa Rica, Juan Vinas (*Schaus*), 2 ♂, 3 ♀, Sitio (*Schaus*), 3 ♀; Colombia, Bogotá (*Vergara*), 1 ♀. *Exp.* 32 millim.

*515 *a*. **Cosmosoma sandion.** (Plate VIII. fig. 18.)

Homœocera sandion, Druce, A. M. N. H. (8) vii. p. 287 (1911).

♂. Head and thorax black, the latter with some metallic blue on dorsum; palpi orange, black at tips; frons above and vertex of head with orange bands; tegulæ orange at tips; shoulders with orange spots, the patagia with orange streak; the mesothorax with orange spot; some orange below shoulders and wings, the tibiæ and tarsi with orange streaks; abdomen black, the terminal segments with some metallic blue on dorsum and at sides, subdorsal series of orange bands, the band on 2nd segment complete dorsally, the ventral surface with the basal segments orange. Fore wing hyaline, the veins and margins black; the inner margin more broadly black on basal half; the terminal line expanding somewhat at apex and into a small triangular spot at vein 5. Hind wing hyaline, the veins and margins black; the inner area black with the cilia orange.

Hab. Colombia, Choco slopes, Pueblo Rico, San Juan, type † ♂ in Coll. Joicey. *Exp.* 34 millim.

516. **Cosmosoma durca**, del. *Læmocharis nigripes*, Heyl.

*516 *a*. **Cosmosoma rasera.** (Plate VIII. fig. 19.)

Cosmosoma rasera, D. Jones, Trans. Ent. Soc. 1914, ined. pl. i. f. 10.

Head, thorax, and abdomen black-brown; antennæ with the shaft white above towards tips; metallic blue points behind antennæ and on pro-, meso-, and metathorax, the pectus with lateral metallic blue patches; abdomen with lateral series of metallic blue spots, the ventral surface with white bands on three basal segments and sublateral metallic blue spots on basal segment. Fore wing hyaline, the veins and margins black-brown, the terminal band expanding towards apex and below vein 2. Hind wing hyaline, the veins and margins black, the terminal band expanding towards apex and below vein 2. Underside of both wings with metallic blue points below base of costa.

Hab. S. Brazil, Santos, Alto de Serra (*D. Jones*), type † ♂, Castro Paraña, type † ♀ in Coll. D. Jones. *Exp.*, ♂ 30, ♀ 36 millim.

*516 *b*. Cosmosoma corvica. (Plate VIII. fig. 20.)

Cosmosoma corvica, Dogn. Hét. Nouv. Am. Sud, i. p. 4 (1910).

♀. Head, thorax, and abdomen black; frons, vertex of head, tegulæ, and pectus with metallic blue spots; abdomen with lateral series of metallic blue spots, slight except towards base, the ventral surface with some metallic blue at base followed by three white bands. Fore wing hyaline, the veins and margins black; some metallic blue scales at base; a black discoidal bar conjoined to the black costal area; the terminal band expanding towards apex, its inner edge evenly curved to vein 2 where it expands quadrately. Hind wing hyaline, the veins and margins black; the terminal band expanding on apical area and into a large patch below vein 2.

Hab. Bolivia, Corvico, type † ♀ in Coll. Dognin. *Exp.* 30–36 millim.

*517 *a*. Cosmosoma chiriquensis.

Cosmosoma chiriquensis, Roths. A. M. N. H. (8) v. p. 508 (1910), & Nov. Zool. xx. p. 470, pl. xiii. f. 10.

Abdomen of male with tufts of hair on ventral surface on 4th and 5th segments.

♂. Head black; thorax pale yellow; legs black; abdomen pale yellow with dorsal patch on 2nd and 3rd segments and the two

Fig. 21.—*Cosmosoma chiriquensis*, ♂. ½.

terminal segments black. Fore wing hyaline, the veins and margins black-brown; the base pale yellow; the terminal band expanding widely on apical area and moderately below vein 2. Hind wing hyaline, the veins and margins black-brown; the base pale yellow; the terminal band expanding into an apical patch.

Hab. Panama, Chiriqui, type † ♂ in Coll. Rothschild. *Exp.* 46 millim.

518 *a*. Cosmosoma rubricorpus. (Plate VIII. fig. 21.)

Mystrocneme rubricorpus, Kaye, Entom. xliv. p. 143 (1911).

♂. Head and thorax black-brown; palpi white at base; frons white; tegulæ and metathorax with metallic blue spots; the shoulders with crimson spots; coxæ with white patches, the fore tibiæ with some metallic blue; abdomen black, crimson at base, the crimson extending at sides to 4th segment, the terminal segments

with subdorsal metallic blue spots, the ventral surface white except at extremity. Fore wing black-brown; a wedge-shaped hyaline patch in end of cell; a wedge-shaped patch below the cell with its extremity bisected by a short black streak, a small spot above base of vein 2, and five rather elongate hyaline spots beyond the cell, leaving a lunulate dark spot on discocellulars. Hind wing black-brown with a hyaline streak beyond the cell and two spots beyond it. Underside of fore wing with the retinaculum metallic blue, the rough scales on terminal area brown from costa to submedian fold where they run inwards to the cell; hind wing with the basal half of costal area metallic blue, extending into the cell at base.

Hab. Br. Guiana, Potaro R. (*Roberts*), 1 ♂. *Exp.* 32 millim.

*518 *b*. Cosmosoma crathidina.

Cosmosoma crathidinum, Roths. Nov. Zool. xviii. p. 34 (1911), & xx. p. 470, pl. xiii. f. 4.

♂. Head, thorax, and abdomen dark brown; frons with white line below and points at sides; tegulæ with metallic blue spots; shoulders with crimson spots; coxæ white; abdomen with crimson spots on the lateral basal vesicles and some metallic blue at extremity, the ventral surface with tufts of long white hair from base and the ventral valve white. Fore wing hyaline, the veins, and margins broadly, dark brown; the brown extending to submedian fold on basal area; a large discoidal spot; the terminal band expanding widely on apical area and angled inwards on vein 2 to below end of cell. Hind wing hyaline, the veins, and margins broadly, black-brown; the terminal band broad and expanding below vein 2; the underside with the cell except lower extremity dark brown.

Hab. Ignotus, type † ♂ in Coll. Rothschild. *Exp.* 32 millim.

*518 *c*. Cosmosoma flavicinctata. (Plate VIII. fig. 22.)

Mystrocneme flavicinctata, Dogn. Hét. Nouv. Am. Sud, ii. p. 6 (1911).

♂. Head and thorax black-brown, the back of head, tegulæ, and metathorax with patches of metallic blue; frons white; shoulders with yellow spots; coxæ white, the femora and tibiæ with some metallic blue; abdomen black, the basal segments yellow, extending at sides to beyond middle, the terminal segments with lateral metallic blue patches and the anal segment with dorsal patch, the ventral segment white except at extremity. Fore wing black-brown; a slight hyaline streak below costa near base; a wedge-shaped hyaline patch in end of cell and another below end of cell indented at extremity; postmedial hyaline spots above and below veins 6 and 4. Hind wing black-brown with an elongate hyaline spot below the cell and two beyond the cell; the underside with the basal costal area suffused with metallic blue.

Hab. Br. Guiana, Mallali, type † ♂ in Coll. Dognin. *Exp* 30 millim.

519 *a*. **Cosmosoma pellucida.** (Plate VIII. fig. 23.)

Cosmosoma pellucida, Lathy, Entom. xxxii. p. 117 (1899).

♀. Head, thorax, and abdomen black; frons, shoulders, and coxæ with white spots; vertex of head, tegulæ, patagia, and metathorax with patches of blue; abdomen with crimson subdorsal patches on first segment and lateral fasciæ on 1st four segments, the ventral surface white to near extremity; wings hyaline, the veins and margins black. Fore wing with a large discoidal lunule conjoined to the costal fascia; the fascia on inner margin expanding at base; the terminal band expanding very widely on apical area and at tornus where it emits a streak in submedian fold. Hind wing with the cell and inner area black; a terminal band expanding on apical area.

Hab. Brazil, St. Palma, 1 ♀ type. *Exp.* 38 millim.

*520 *a*. **Cosmosoma achemonides.** (Plate VIII. fig. 24.)

Cosmosoma achemonides, Dognin, Ann. Soc. Ent. Belg. li. p. 223 (1907).

♂. Head black with metallic blue patch on frons and paired spots behind antennæ which are whitish at tips; thorax scarlet; pectus and legs black with metallic blue patches at sides and on fore coxæ in front; abdomen black with metallic blue lateral patches and at base of ventral surface, a broad scarlet dorsal stripe except at extremity. Fore wing hyaline, the veins and margins narrowly black; a black discoidal lunule; the base and stripes below costa and above inner margin orange-scarlet; a large patch of orange-scarlet below base of vein 4, between veins 3 and 2 to termen, and below extremity of vein 2; the terminal area orange-scarlet, broad at apex, narrowing to vein 3. Hind wing hyaline, the veins black; the basal half of costal area, the cell, base of inner area, and cilia on inner margin orange-scarlet; the inner area and a broad terminal band black-brown.

♀. Fore wing without the orange-scarlet patch between end of cell and termen, the terminal area black-brown slightly tinged with scarlet; hind wing with the terminal band much narrower.

Hab. Peru, Cagon, types † ♂, ♀ in Coll. Dognin. *Exp.* 34 millim.

521. **Cosmosoma festiva.**

Subsp. 1. ♂. Tegulæ, patagia, and thorax wholly orange; abdomen with orange dorsal spots on 1st four segments. Fore wing without orange marks on terminal area.

Hab. Amazons, Villa Nova in Mus. Oxon.

521 *a*. **Cosmosoma remota**, Wlk., trans. from p. 248 and insert (syn.):—

Cosmosoma sicula, Dyar, J. N.Y. Ent. Soc. vii. p. 175 (1899)

521 *b*. Cosmosoma anoxanthia. (Plate VIII. fig. 25.)

Cosmosoma anoxanthia, Druce, A. M. N. H. (7) xv. p. 460 (1905).
Cosmosoma bolivarensis, Klages, P. U.S. Nat. Mus. xxix. p. 536 (1906).

Head, thorax, and abdomen black; frons, vertex of head, tegulæ, shoulders, pro- and metathorax, pectus, and legs with metallic blue patches; tegulæ with orange-red stripes; abdomen with lateral series of blue patches, the ventral surface with the 1st segment blue followed by sublateral spots on next four segments. Fore wing hyaline, the veins and margins black; two blue points at base, the inner area with a few orange scales; a black discoidal bar connected with an oblique quadrate patch from lower extremity of cell to tornus; the terminal band expanding widely on apical area. Hind wing hyaline with the veins and margins black; the terminal band expanding on apical area; the underside with some blue in cell, the rough scaling on terminal area greyish.

Hab. Venezuela, Caura Valley (*Klages*), 4 ♂. *Exp* 32 millim.

*521 *c*. Cosmosoma thoracica. (Plate VIII. fig. 26.)

Cosmosoma thoracicum, Schaus, P. U.S. Nat. Mus. xxix. p. 186 (1905).

♂. Head black with metallic blue patches on frons and vertex of head; antennæ white at tips; thorax orange, the tegulæ in front and the patagia at shoulders and tips edged with black; pectus and legs black with metallic blue patches on fore coxæ and sides of pectus; abdomen black with subdorsal series of blue spots. Fore wing hyaline, the veins and margins black; an orange patch at base; the terminal band expanding widely on apical area and to median nervure between veins 3 and 2. Hind wing hyaline, the veins and margins black; the terminal band wide from apex to submedian fold, its inner edge somewhat dentate; the underside with the base, the costal area to before middle, and the cell except lower extremity orange.

Hab. Fr. Guiana, Maroni R., type † ♂ in U.S. Nat. Mus. *Exp.* 28 millim.

*522 *a*. Cosmosoma thia. (Plate VIII. fig. 27.)

Cosmosoma thia, Druce, A. M. N. H. (7) iii. p. 229 (1899).

♂. Head, thorax, and abdomen black, frons, vertex of head, meso- and metathorax with patches of blue; tegulæ orange edged with black; mid and hind tarsi orange, the hind tibiæ striped with orange; abdomen with orange lateral patches on 1st four segments, meeting dorsally on 3rd and 4th segments, subdorsal and lateral blue patches on terminal segments; wings hyaline, the veins and margins black. Fore wing with orange streaks below costa and on inner margin to well beyond middle; a discoidal band connected with the costal fascia and a patch between bases of veins 2 and 4 with orange marks on it; the terminal band expanding widely on apical area and with an orange mark on its inner side at tornus.

Hind wing with some orange at base of inner margin; a discoidal spot; the terminal band expanding widely towards apex.

Hab. Ecuador, Chiguinda (*Buckley*), type † ♂ in Coll. Joicey. *Exp.* 32 millim.

523. **Cosmosoma teuthras**, insert (syn.) :—

Cosmosoma rubrigutta, Skinner, Ent. News Philad. xvii. p. 96 (1906)

U.S.A., Arizona, Douglas.

*523 *a*. **Cosmosoma lignicolor.**

Cosmosoma teuthras, lignicolor, Roths. Nov. Zool. xviii. p. 35 (1911), & xx. p. 470, pl. xiii. f. 14.

♂. Head and thorax brown, the frons and vertex of head with metallic blue spots; tegulæ and upper edge of patagia orange-yellow; some yellow below base of wings; abdomen brown with lateral yellow patches at base and dorsal series of indistinct yellowish patches, subdorsal and sublateral series of blue spots. Fore wing hyaline, the veins and margins brown; an orange-yellow streak below costa and fascia above inner margin; a discoidal brown spot with orange centre conjoined to the costal area; the terminal band expanding very widely on apical area and slightly below vein 2. Hind wing hyaline, the veins and margins black-brown; the inner area orange-yellow to near tornus; the terminal band expanding into patches on apical area and towards tornus; the underside with the basal costal area yellow.

Hab. Ecuador, Paramba (*Rosenberg*), type † ♂ in Coll. Rothschild. *Exp.* 38 millim.

*525 *a*. **Cosmosoma parambæ.**

Cosmosoma parambæ, Roths. Nov. Zool. xviii. p. 35 (1911), & xx. p. 470, pl. xiii. f. 9.

♀. Head and thorax dark brown, the vertex of head and metathorax with metallic blue patches, the tegulæ with slight yellowish marks, the patagia with yellowish streaks at middle and on upper edge; pectus with some yellow below the shoulders and wings and some blue at sides of coxæ; abdomen dark brown, the three basal segments yellow at sides and with metallic blue dorsal marks, the following segments with subdorsal and sublateral series of blue spots. Fore wing hyaline, the veins and margins dark brown; some brown suffusion on basal area and above base of vein 2; slight yellowish streaks below the costa and above base of inner margin; a small black discoidal spot; the terminal band expanding widely on apical area and slightly below vein 3. Hind wing hyaline, the veins and margins dark brown; the base and inner area yellow; the terminal band expanding towards apex and into a wedge-shaped patch on vein 1 extending to near base; the underside with yellow streak below basal half of costa.

Hab. Ecuador, Paramba, type † ♀ in Coll. Rothschild. *Exp.* 42 millim.

*526 *a*. Cosmosoma nigrescens.

Cosmosoma teuthras, nigrescens, Roths. Nov. Zool. xviii. p. 35 (19 1), & xx. p. 470, pl. xiii. f. 20.

♂. Head black, scarlet behind, and with metallic blue spots on frons and vertex; thorax scarlet; legs dark brown; abdomen black-brown with scarlet lateral patches at base, a small dorsal blue spot on basal segment, and subdorsal and sublateral series of spots on the other segments. Fore wing hyaline, the veins and margins black-brown; a slight scarlet streak below costa and scarlet fascia on basal half of inner area; a large black discoidal spot conjoined to the costal area; the terminal band expanding widely on apical area and slightly below vein 2. Hind wing hyaline, the veins and margins black-brown; the base and inner margin scarlet; the terminal band expanding into an apical patch and into a wedge-shaped patch on vein 1; the underside with the basal costal area scarlet.

Hab. Colombia, Cundinamarca, Guadalite (*M. de Mathan*), type † ♂ in Coll. Rothschild. *Exp.* 46 millim.

527. Cosmosoma achemon, ab. *tyrrhene*, insert (syn.):—

Cosmosoma perfenestratum, Dyar, J. N.Y. Ent. Soc. vii. p. 175 (1899).

Fore wing with orange-red discoidal spot, the terminal band almost wholly suffused with red.

*534 *a*. Cosmosoma carmena. (Plate VIII. fig. 28.)

Cosmosoma carmena, Dognin, Ann. Soc. Ent. Belg. xliii. p. 250 (1899).

♀. Head, thorax, and abdomen black; frons, vertex of head, tegulæ, mesothorax, and coxæ with patches of metallic blue; patagia with orange stripes; mid tarsi and greater part of hind tibiæ and tarsi orange; abdomen with orange lateral bands on first four segments, leaving triangular dorsal spots with blue points on them; a sublateral series of blue spots and subdorsal spots on terminal segment; wings hyaline, the veins, and margins rather broadly, black. Fore wing with subcostal orange streak extending to beyond middle and two short streaks above base of inner margin; the terminal band expanding very widely on apical area and slightly at tornus. Hind wing with the inner area black with slight orange streak at base.

Hab. Ecuador, Loja, type † ♀ in Coll. Dognin. *Exp.* 36 millim.

538 *a*. Cosmosoma impudica. (Plate VIII. fig. 29.)

Cosmosoma impudica, Schaus, A. M. N. H. (8) vii. p. 177 (1911).

Head black, the frons with lateral white spots; thorax yellow, the ventral part of pectus and legs black; abdomen yellow. Fore wing hyaline, the veins and margins black, some yellow at base; a black discoidal lunule; the black on termen expanding widely on

apical area and below vein 2. Hind wing hyaline, the veins and margins black, the inner area black; the black on termen expanding into a patch at apex.

Hab. Costa Rica, Juan Vinas (*Schaus*), 1 ♂, Sitio (*Schaus*), 1 ♀. *Exp.*, ♂ 36, ♀ 44 millim.

*538 *b*. Cosmosoma flavita. (Plate VIII. fig. 30.)

Cosmosoma flavita, Schaus, J. N.Y. Ent. Soc. ix. p. 41 (1901).

♂. Head black; thorax yellow, the prothorax with paired black spots, the patagia black on outer side towards extremity; legs black; abdomen yellow, the last three segments black; wings hyaline, the veins and margins black. Fore wing with some black at base, the terminal band expanding very widely on apical area and moderately towards tornus. Hind wing with some black at base, the terminal band expanding towards apex.

Hab. Colombia (*Pratt*), type † ♂ in U.S. Nat. Mus. *Exp.* 38 millim.

*538 *a*. Cosmosoma analicincta.

Cosmosoma analicincta, Roths. A. M. N. H. (8) v. p. 509 (1910), & Nov. Zool. xx. p. 472, pl. xiv. f. 51.

♀. Head and thorax orange-yellow; palpi and antennæ black; the fore femora and tibiæ, the mid and hind tibiæ except towards base above, and the tarsi black-brown; abdomen orange-yellow with the terminal segment black, the ventral surface pale yellow with black band on anal segment. Fore wing hyaline, the veins and margins black; the terminal band expanding widely on apical area and slightly below vein 2. Hind wing hyaline, the veins and margins black; the terminal band expanding into an apical patch and dentate mark at vein 1.

Hab. Peru, Carabaya, R. Huacamayo, La Union (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

*542 *a*. Cosmosoma notosticta. (Plate VIII. fig. 31.)

Cosmosoma notosticta, Dogn. Ann. Soc. Ent. Belg. liii. p. 214 (1909).

♀. Head black, the frons yellowish white, the back of head orange; thorax orange with small black spots at base of patagia and black dorsal fascia; legs fuscous and orange; abdomen orange with dorsal and lateral series of black spots, the extremity black. Fore wing hyaline, the veins and margins narrowly black, the terminal line expanding at apex and slightly at tornus. Hind wing hyaline, the veins and margins narrowly black, the inner margin more broadly black, the terminal line expanding at apex.

Hab. Colombia, type † ♀ in Coll. Dognin. *Exp.* 30 millim.

*542 *b*. Cosmosoma stictinota. (Plate VIII. fig. 32.)

Cosmosoma stictinota, Dogn. Hét. Nouv. Am. Sud, vii. p. 5 (1914).

♂. Head black, the frons white at sides; thorax fulvous orange, the prothorax with pair of black points and the patagia with black points at base and black tips; pectus with lateral black spots in front, the femora and tibiæ black and the tarsi yellow at base, black at tips; the hind tarsi wholly black; abdomen fulvous orange with dorsal series of large black spots, lateral spots, except towards base, and the extremity black. Fore wing hyaline, the veins and margins black; short yellow streaks below base of costa and above inner margin; the black on termen expanding widely on apical area and slightly below vein 2. Hind wing hyaline, the veins and margins black; some yellow at extreme base; the black on termen expanding at apex; the underside with the base orange.

Hab. E. Colombia, Medina (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 28 millim.

*542 *c*. Cosmosoma dorsicincta. (Plate IX. fig. 1.)

Cosmosoma dorsicincta, Dogn. Hét. Nouv. Am. Sud, v. p. 6 (1912).

♀. Head black-brown; thorax yellow with a brown patch at middle of dorsum; the patagia edged with black towards tips; legs brown; abdomen orange-yellow with dorsal black spots on two basal segments followed by dorsal bands on the other segments, lateral series of small spots, the ventral surface with narrow black bands on three terminal segments. Fore wing hyaline, the veins and margins black, the terminal band expanding widely on apical area and below vein 2. Hind wing hyaline, the veins and margins black, the black on termen expanding towards apex.

Hab. Colombia, Medina (*Fassl*), type † ♀ in Coll. Dognin. *Exp.* 32 millim.

*542 *d*. Cosmosoma diplosticta. (Plate IX. fig. 2.)

Cosmosoma diplosticta, Dogn. Hét. Nouv. Am. Sud, vii. p. 6 (1914).

♂. Head, thorax, and abdomen fulvous orange; antennæ and palpi except at base black; patagia with some black at tips; femora except at extreme base, the tibiæ, and tarsi black, the mid tibiæ with orange streaks above towards base; abdomen with subdorsal, lateral, and sublateral series of black spots, the extremity black. Fore wing hyaline, the veins and margins black; the base fulvous orange, extending as a short fascia below costa; the black on termen expanding widely on apical area and slightly below vein 2. Hind wing hyaline, the veins and margins black; some orange at base; the black on termen expanding towards apex.

Hab. E. Colombia, Medina (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 36 millim.

544 *a*. Cosmosoma clagesi.

Cosmosoma klagesi, Roths. A. M. N. H. (8) v. p. 509 (1910), & Nov. Zool. xx. p. 470, pl. xiii. f. 11.

♂. Head and thorax black; frons with lateral white spots, the back of head with some white scales; shoulders and prothorax with white spots; fore coxæ white, the mid and hind coxæ with white spots; abdomen orange, the base and ventral surface yellow. Fore wing hyaline, the veins, and margins rather broadly, black; a small white spot at base of costa and subbasal white spot below costa; the terminal band expanding widely on costal area and slightly below vein 2. Hind wing hyaline, the veins and margins black; the terminal band expanding into an apical patch.

Hab. Trinidad, Caparo (*Klages*), type † ♂ in Coll. Rothschild; Brazil, Amazons, Pará (*Bates*), 1 ♂. *Exp.* 32 millim.

*546 *a*. Cosmosoma plagiata.

Cosmosoma plagiata, Roths. A. M. N. H. (8) v. p. 510 (1910), & Nov Zool. xx. p. 472, pl. xiv. f. 53.

♀. Head and thorax black; coxæ yellow; abdomen yellow with dorsal black patch on 4th, 5th, and 6th segments and the extremity black, the ventral surface with the terminal segments black. Fore wing hyaline, the veins and margins black; a black discoidal patch; the black on termen expanding into a large apical patch and small patch at tornus. Hind wing hyaline, the veins and margins black, the black on termen expanding into a small apical patch and dentate mark at submedian fold.

Hab. Peru, Carabaya, St. Domingo (*Ockenden*), type † ♀ in Coll. Rothschild. *Exp.* 30 millim.

*546 *b*. Cosmosoma vatsoni.

Cosmosoma watsoni, Roths. A. M. N. H. (8) v. p. 508 (1910), & Nov. Zool. xx. p. 470, pl. xiii. f. 5.

♀. Head and thorax dark brown; abdomen yellow, the three terminal segments black-brown with a faint bluish gloss. Fore wing hyaline, the veins, and margins rather broadly, black-brown; a large discoidal spot; the terminal band expanding widely on apical area and moderately below vein 3. Hind wing hyaline, the veins, margins, and inner area black-brown; the black on termen expanding into an apical pitch.

Hab. Panama, Chiriqui, type † ♀ in Coll. Rothschild. *Exp.* 42 millim.

*546 *c*. Cosmosoma buchvaldi.

Cosmosoma buchwaldi, Roths. A. M. N. H. (8) v. p. 509 (1910), & Nov. Zool. xx. p. 470, pl. xiii. f. 6.

♂. Head and thorax dark-brown, the back of head with bluish white spot; fore femora streaked with yellow behind; abdomen

dark brown with conjoined lateral yellow patches on basal segments and the extremity yellow, the ventral surface with the basal half yellow. Fore wing hyaline, the veins and margins black-brown; a slight yellowish streak above inner margin near base; a black discoidal lunule; the terminal band expanding into a large patch on apical area and slightly below vein 2. Hind wing hyaline, the veins, margins, and inner area black-brown; the terminal band expanding towards apex; the underside with whitish streak in upper part of cell.

Hab. Ecuador, Quevedo (*Buchwald*), type † ♂ in Coll. Rothschild. *Exp.* 34 millim.

*546 *d.* Cosmosoma pulchra.

Cosmosoma rosenbergi, Roths. Nov. Zool. xviii. p. 35 (1911), nec Roths. 1910.

Cosmosoma pulchrum, Roths. Nov. Zool. xx. p. 470, pl. xiii. f. 8 (1913).

♀. Head and thorax black, the frons, vertex of head, and tegulæ with metallic blue spots; metathorax orange-yellow with metallic blue spot; pectus and legs orange-yellow, the fore femora in front, the tibiæ behind, and the tarsi brown; abdomen yellow, the three terminal segments black-brown with lateral metallic blue spots. Fore wing hyaline, the veins and margins black; an orange-yellow streak below basal half of costa, the base and basal half of inner area orange-yellow; a black discoidal lunule; the terminal band expanding very widely on apical area and moderately below vein 2. Hind wing hyaline, the base and costal and inner areas to beyond middle orange-yellow; the veins towards termen black; a terminal black band expanding on apical area and below vein 2.

Hab. Ecuador, Paramba, Cachabé (*Rosenberg*), type † ♀ in Coll. Rothschild. *Exp.* 40 millim.

547 *a.* Cosmosoma angustimargo. (Plate IX. fig. 3.)

Cosmosoma angustimargo, Schaus, A.M.N.H. (8) vii. p. 177 (1911).

♀. Head and thorax black; frons white; shoulders with white spots; coxæ with whitish patches; abdomen yellow, the extremity black. Fore wing hyaline, the veins and margins black; a white spot at base; the terminal black band expanding widely on apical area and below vein 2. Hind wing hyaline, the veins and margin black, the terminal band expanding into a small patch on apical area.

Hab. Costa Rica, Tuis (*Schaus*), 1 ♀, Juan Vinas (*Schaus*), 1 ♀. *Exp.* 36–40 millim.

*547 *b.* Cosmosoma occendeni.

Cosmosoma ockendeni, Roths. A.M.N.H. (8) v. p. 509 (1910), & Nov. Zool. xx. p. 472, pl. xiv. f. 52.

♂. Head and thorax black; coxæ yellow; abdomen black, the three basal segments dorsally and ventrally yellow. Fore wing

hyaline, the veins and margins black, the black on termen expanding into an apical patch. Hind wing hyaline, the veins and margins black, the black on termen expanding somewhat towards apex and at submedian fold.

Hab. Peru, Carabaya, St. Domingo (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

*547 *c.* Cosmosoma rosenbergi.

Cosmosoma rosenbergi, Roths. A.M.N.H. (8) v. p. 508 (1910), & Nov. Zool. xx. p. 470, pl. xiii. f. 1.

♀. Head and thorax dark brown; frons white; vertex of head with two white points; shoulders and prothorax with white spots; small white spots below shoulders; fore coxæ with white patches; abdomen with the basal half orange-yellow with narrow black-brown dorsal line on 1st segments and bands on the next two segments, the terminal half black-brown with a faint bluish gloss. Fore wing hyaline, the veins and margins black-brown; a subbasal white point in cell; the terminal band expanding widely on apical area and slightly below vein 2. Hind wing hyaline, the veins, margins, and inner area black-brown; the terminal band expanding towards apex; the underside with whitish streak in upper part of cell.

♂. Abdomen yellow with the two terminal segments black.

Hab. Colombia, R. Dagua; Ecuador, Chimbo, Paramba (*Rosenberg*), type † ♀ in Coll. Rothschild. *Exp.* 40 millim.

*548 *a.* Cosmosoma phœnicophora. (Plate IX. fig. 4.)

Cosmosoma phœnicophora, Dogn. Ann. Soc. Ent. Belg. liii. p. 214 (1909).

♂. Head and thorax black-brown; tegulæ with crimson spots; legs with yellowish streaks; abdomen black-brown with broad lateral crimson stripes except at extremity. Fore wing hyaline, the veins and margins black-brown; the base black-brown with some crimson at base of inner margin; a large discoidal black-brown patch conjoined to the costal area; the terminal band expanding at apical area and widely towards tornus. Hind wing hyaline, the inner area crimson; veins black; a wedge-shaped discoidal spot; a terminal black-brown band expanding at apex and triangularly below vein 2.

Hab. Fr. Guiana, St. Laurent Maroni, type † ♂ in Coll. Dognin. *Exp.* 18 millim.

*550 *a.* Cosmosoma coccinifera. (Plate IX. fig. 5.)

Cosmosoma coccinifera, Dogn. Hét. Nouv. Am. Sud, v. p. 7 (1912).

♀. Head, thorax, and abdomen black slightly glossed with blue; frons with white spot; tegulæ, patagia, and metathorax with bright crimson patches, the mesothorax with pair of crimson

points; fore coxæ white; abdomen with subdorsal series of bright crimson patches except on terminal segment, lateral crimson fasciæ on two basal segments, the basal half of ventral surface white. Fore wing hyaline, the veins and margins black; the base black; a black discoidal bar; the terminal band expanding on apical area and below vein 2. Hind wing hyaline, the veins, margins, and inner area black; the terminal band expanding towards apex.

Hab. Colombia, Medina (*Fassl*), type † ♀ in Coll. Dognin *Exp.* 28 millim.

559 *a*. **Mystrocneme albicorpus.** (Plate IX. fig. 7.)

Mystrocneme albicorpus, Kaye, Entom. xliv. p. 143 (1911).

♂. Head and thorax black-brown; frons white; shoulders with white spots; tegulæ, patagia, and metathorax with metallic blue spots; coxæ white; abdomen black-brown, the base and ventral surface except at extremity yellowish white, the terminal half with subdorsal metallic blue stripes. Fore wing black-brown; a metallic blue spot below base of cell; a wedge-shaped hyaline patch in cell and a patch below the cell indented at extremity; rather elongate postmedial hyaline spots between veins 7 and 3, the spot above vein 5 small; a slight spot below vein 3 and point above base of vein 2. Hind wing black-brown with elongate hyaline spot below the cell and two spots beyond the cell. Underside of both wings with the terminal area clothed with grey-brown scales except towards tornus.

Hab. Br. Guiana (*Rodway*, *Kaye*), 2 ♂, Potaro R. (*Roberts*), type † ♂ in Coll. Kaye. *Exp.* 30 millim.

559 *b*. **Mystrocneme secta.** (Plate IX. fig. 8.)

Mystrocneme sectum, Kaye, Entom. xliv. p. 143 (1911).

♂. Head and thorax black mixed with some olive-brown; palpi white at base; frons white; tegulæ and shoulders with whitish and olive spots, the patagia and metathorax with some metallic blue; coxæ with white patches; abdomen black with diffused silvery blue lateral stripes, white lateral spots on the ventral tubercles, and a white ventral stripe. Fore wing black-brown; a slight metallic blue streak above base of vein 1; a slight semi-hyaline mark in middle of cell and short hyaline streak below the cell; a small hyaline postmedial spot above vein 3. Hind wing black-brown, the extreme base whitish. Underside of fore wing with some metallic blue on retinaculum, the terminal area pale brown from costa to submedian fold where the brown runs inwards to the cell; hind wing with the basal half of costa metallic blue.

Hab. Br. Guiana, Potaro R. (*Roberts*), 1 ♂. *Exp.* 32 millim.

561 *a*. **Dixophlebia holophæa.** (Plate IX. fig. 9.)

Dixophlebia holophæa, Hmpsn. A. M. N. H. (8) iv. p. 346 (1909).

♂. Head, thorax, and abdomen black-brown with a faint bluish gloss; sides of frons grey; ventral surface of abdomen greyish. Fore wing black-brown with a hyaline streak in the cell, a triangular fascia below the cell and fascia above basal half of vein 2. Hind wing black-brown with hyaline streak in and beyond lower end of cell to near termen.

Hab. Br. Guiana, Demerara (*Rodway*), 1 ♂ type, Hyama Creek, 1 ♂. *Exp.* 26 millim.

*563 *a*. **Ichoria chrostomides.** (Plate XIII. fig. 32.)

Ichoria chrostomides, Schaus, Pr. U.S. Nat. Mus. xxix. p. 187 (1905).

♂. Head, thorax, and abdomen black; palpi at base and sides of frons whitish; shoulders and patagia with crimson spots; coxæ white in front; abdomen tinged with blue and with some metallic blue at sides towards extremity, the base of ventral surface whitish. Fore wing hyaline, the veins and margins black; the base, inner margin, and apical area rather broadly black. Hind wing hyaline suffused with black, the inner area clear hyaline, the apical area, and the terminal area below vein 2 broadly, darker.

Hab. Fr. Guiana, St. Laurent Maroni, type † ♂ in U.S. Nat. Mus. *Exp.* 22 millim.

*563 *b*. **Ichoria semiopaca.** (Plate IX. fig. 10.)

Ichoria semiopaca, Dogn. Ann. Soc. Ent. Belg. l. p. 179 (1906).

♀. Head, thorax, and abdomen black-brown; shoulders with crimson spots; abdomen with paired dorsal crimson spots on 1st segment and subbasal series of metallic green patches. Fore wing black-brown with small semihyaline patch in middle of cell, elongate patch below the cell and patches beyond the cell between veins 7 and 3, the patches below veins 5, 4 extending to near termen. Hind wing with the basal half hyaline with the veins black, the terminal half black-brown with somewhat dentate inner edge.

Hab. Brazil, São Paulo, Paranapanema, type † ♀ in Coll. Dognin. *Exp.* 32 millim.

*567 *a*. **Ichoria virescens.** (Plate IX. fig. 11.)

Ichoria virescens, Dogn. Hét. Nouv. Am. Sud, vii. p. 7 (1914).

♂. Head and thorax black; fore coxæ with white patches; hind coxæ with white spots; abdomen bronze-green with white patches on the ventral valve. Fore wing bronze-green, the veins blackish. Hind wing hyaline, the veins, costal area, cell except

lower angle, and a terminal band expanding towards apex and tornus, fuscous with a bronze tinge.

Hab. Colombia, E. Cordova, Pacho (*Fassl*), type † ♂ in Coll. Dognin; Bolivia, Tarija in Mus. Buenos Ayres. *Exp.* 38 millim.

571. **Pseudomya picta**, insert (syn.) :—

Pseudomya trabea, Druce, A. M. N. H. (7) iii. p. 230 (1899).

Ecuador, Sarayacu (*Buckley*), type † ♂ *trabea* in Coll. Joicey.

573. **Pseudomya trigutta** is a distinct species.

*573 *a*. **Pseudomya melanthus.**

Sphinx melanthus, Stoll, Pap. Exot. iv. pl. 367 c (1782).

♀. Head, thorax, and abdomen black; back of head, tegulæ, shoulders, and metathorax with paired crimson spots; abdomen with the 1st four segments ventrally white. Fore wing hyaline, the veins and margins narrowly black; some black suffusion at base and a broad rather diffused medial black band. Hind wing with the basal half hyaline, the veins black, the terminal half black.

Hab. Trinidad, Ariapite Valley in Coll. Rothschild; Surinam, *Exp.* 28 millim.

*573 *a*. **Pseudomya nigrozona.** (Plate IX. fig. 12.)

Pseudomya nigrozonum, Schaus, Pr. U.S. Nat. Mus. xxix. p. 187 (1905).

♀. Head, thorax, and abdomen black with a slight bluish gloss; fore coxæ whitish in front; ventral surface of abdomen whitish with black segmental lines. Fore wing hyaline, the veins and margins narrowly black; the basal area black except towards costa; the inner margin with black fascia to the broad black medial band which expands on outer side below angle of cell. Hind wing hyaline, the veins and margins narrowly black; the apical area black from costa just beyond middle to termen at vein 1, its inner edge somewhat dentate.

Hab. Fr. Guiana, St. Laurent Maroni, type † ♀ in U.S. Nat. Mus. *Exp.* 22 millim.

576 *a*. **Holophæa cardinalis.**

Saurita cardinalis, Roths. Nov. Zool. xviii. p. 37 (1911), & xx. p. 470, pl. xiii. f. 32.

♂. Head and thorax deep crimson; palpi, lower part of frons, and antennæ black; pectus, legs, and abdomen black, the last with a faint bluish gloss. Fore wing with the basal area deep crimson to near middle, its outer edge oblique, the rest of wing black.

Hind wing with the basal area deep crimson to near middle, its outer edge oblique, the rest of wing black.

Hab. Costa Rica, Carillo (*Schaus*), 1 ♂. *Exp.* 30 millim. Type † ♂ in Coll. Rothschild.

*576 *b*. **Holophæa gentilicia.** (Plate IX. fig. 13.)

Holophæa gentilicia, Schaus, A. M. N. H. (8) vii. p. 178 (1911).

♂. Head black-brown with the vertex scarlet; thorax scarlet; pectus, legs, and abdomen black-brown. Fore wing black-brown with a scarlet patch at base with oblique outer edge. Hind wing black-brown; the underside with some scarlet at base.

Hab. Costa Rica, Juan Vinas (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 32 millim.

*577 *a*. **Holophæa endoleuca.** (Plate IX. fig. 14.)

Holophæa endoleuca, Dogn. Ann. Soc. Ent. Belg. liii. p. 214 (1909).

♀. Head and thorax black, the frons, vertex of head, tegulæ, pro-, meso-, and metathorax with metallic blue patches; shoulders with crimson spots; coxæ with blue patches; abdomen black with dorsal crimson band at base and lateral and sublateral series of metallic blue patches. Fore wing black-brown. Hind wing black-brown, the inner area white except towards tornus, with slight black streak on base of vein 1.

Hab. Colombia, type † ♀ in Coll. Dognin. *Exp.* 40 millim.

*577 *b*. **Holophæa melita.** (Plate IX. fig. 15.)

Holophæa melita, Druce, A. M. N. H. (7) iii. p. 230 (1899).

♂. Black-brown; frons with blue patch; shoulders with crimson patches; abdomen with dorsal crimson patch on 1st segment and lateral series of blue-green patches becoming dorsal bands on last two segments, the ventral surface yellowish white to beyond middle.

Hab. Ecuador, Chiguinda (*Buckley*), type † ♂ in Coll. Joicey. *Exp.* 34 millim.

577 *c*. **Holophæa eurytorna**, n. sp. (Plate IX. fig. 16.)

Hind wing of male with the tornal area somewhat dilated and clothed with rough scales on underside.

♂. Head and thorax black-brown, the frons, vertex of head, and metathorax with patches of metallic green, the shoulders with crimson spots; coxæ with some metallic green; abdomen black-brown with crimson patch at base of dorsum, lateral series of metallic green bars and sublateral bars on basal segments. Wings uniform black-brown.

Hab. W. Colombia, San Antonio (*Palmer*), 1 ♂ type. *Exp.* 36 millim.

*579 *a*. Holophæa lugens.

Holophæa lugens, D. Jones, Trans. Ent. Soc. 1908, p. 144.

Abdomen of male without ventral valve.

♂. Black-brown with a faint bluish tinge on head, thorax, abdomen, and costa of fore wing; fore coxæ white on inner side,

Fig. 22.—*Holophæa lugens*, ♂. ½.

the tarsi whitish at extremity above. Fore wing with the cell and area just below it rather thinly scaled.

Hab. Brazil, São Paulo, type † ♂ in Coll. D. Jones. *Exp.* 30 millim.

582. Hypatia melaleuca.

♂. Palpi pure white in front; tegulæ scarlet; mesothorax with dorsal scarlet bar; abdomen with the first five segments scarlet dorsally and at sides, with slight dorsal white marks on 2nd and 3rd segments and black mark on 5th; hind wing without the hyaline fascia below the cell and beyond lower angle.

Fr. Guiana, Cayenne, a pair taken in copula by W. Schaus.

*583 *a*. Psilopleura flavicans. (Plate IX. fig. 17.)

Horama flavicans, Dogn. Hét. Nov. Am. Sud, ii. p. 11 (1911).

♀. Head and thorax black-brown, the patagia with slight orange streaks on outer edge; frons with lateral white spots; pectus with orange stripes below the wings; coxæ with white patches; abdomen orange, the dorsum black-brown except at extremity. Fore wing orange, the costa, subcostal nervure, median nervure, and veins arising from it black; the inner and terminal areas black-brown, the latter broadly, the dark inner area not extending to base and expanding towards the terminal area, the outer edge of the orange area slightly waved. Hind wing orange with black-brown terminal band expanding somewhat towards costa, the veins beyond the cell slightly streaked with black; the underside with the costal edge black to near base.

Hab. Colombia, San Antonio (*Fassl*), type † ♀ in Coll. Dognin. *Exp.* 30 millim.

*583 *b*. Psilopleura clagesi.

Psilopleura klagesi, Roths. Nov. Zool. xviii. p. 36 (1911), & xx. p. 471, pl. xiii. f. 41.

♂. Head and thorax chocolate-brown with a pale yellow stripe on vertex of head and dorsum of thorax except the metathorax; antennæ with the shaft white at base; palpi white at base and with white ring at base of 3rd joint; coxæ white; tarsi ringed with white; abdomen chocolate-brown with subdorsal orange-yellow stripes except on two terminal segments, the dark dorsal stripe somewhat maculate, the ventral valve creamy white except at sides, the three following segments with a maculate stripe. Fore wing chocolate-brown; two small rather elongate creamy white marks in cell towards extremity with a small spot below them; an irregular creamy white postmedial patch formed by four confluent spots between veins 7 and 3; the terminal area with slight patches of whitish scales in the interspaces; a terminal series of white points. Hind wing white; the upper part of cell, discocellulars, and costal area brown; the inner area brown with some yellow at base; a terminal brown band expanding towards apex and below vein 2; the underside with the inner area yellowish white to towards tornus.

Hab. Venezuela, Ciudad Bolivar (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 34 millim.

*583 *c*. Psilopleura pentheri. (Plate IX. fig. 18.)

Psilopleuri penthera, Zerny, Iris, xxvi. p. 122 (1912).

♀. Head and thorax chocolate-brown, the vertex of head creamy white with round black spots behind antennæ, which are white towards base and before tips, the thorax with dorsal creamy white streak; palpi with the extremities of 1st and 2nd joints whitish; coxæ white; tibiæ white at extremities, the fore tibiæ with white point at middle, the tarsi ringed with white; abdomen black-brown with broad subdorsal orange stripes formed of vertebræ-like patches except at extremity, the ventral surface red-brown with broad white stripe except on terminal segments. Fore wing chocolate-brown slightly irrorated with grey; a terminal series of slight whitish spots. Hind wing chocolate-brown; some white at base and some orange at base of inner margin; an elongate white spot below the cell and a patch beyond the cell between veins 6 and 3. Underside of fore wing with some white at base, a slight whitish spot in middle of cell and patch below it, a curved postmedial series of three spots between veins 7 and 4.

Hab. Brazil, Bahia, Joazeiro (*Penther*), type † ♀ in Mus. Vienna. *Exp.* 34 millim.

585 *a*. **Psilopleura dolens.** (Plate IX. fig. 19.)

Psilopleura dolens, Schaus, A. M. N. H. (8) vii. p. 178 (1911).

♂. Head, thorax, and abdomen black-brown; shoulders with crimson spots, the patagia towards extremities with crimson patches. Fore wing hyaline, the veins and margins black-brown; the base and inner area black-brown; the black-brown on termen expanding widely on apical area. Hind wing hyaline, the veins and margins black; the black on termen expanding on apical area and below submedian fold where it extends as a streak to base.

♀. Blacker; the crimson on patagia reduced to a small spot.

Hab. Costa Rica, Sixola R. (*Schaus*), 1 ♂, 1 ♀. *Exp.*, ♂ 22, ♀ 26 millim.

*585 *b*. **Psilopleura hæmasoma.** (Plate IX. fig. 20.)

Psilopleura hæmasoma, Curtis, Bournemouth Natural Science Soc. iii. p. 1, plate (1912).

Psilopleura sanguinea, D. Jones, Trans. Ent. Soc. 1912 (Oct.), p. 419.

Head and thorax fulvous brown, the vertex of head with slight grey stripe, the palpi grey at base; tegulæ edged with grey at middle and sides and with some crimson scales; patagia with the upper edge and base of outer edge crimson; prothorax with pair of crimson stripes edged with grey; pectus and coxæ with crimson patches; abdomen crimson, the 1st segment dark brown, a dorsal series of triangular brown patches with grey stripe through them; subdorsal patches of opalescent white scales on segments 4, 5, 6. Fore wing fulvous brown, thinly scaled; a yellow patch near base below costa and a quadrate patch in end of cell, extending to costa and with some dark brown before and beyond it. Hind wing fulvous brown, the lower part of cell, the area just beyond it, and the inner area to near termen hyaline.

Hab. Brazil, Castro Paraña, type † ♂ in Coll. W. P. Curtis, *sanguinea* type † ♂, ♀ in Coll. D. Jones. *Exp.* 22 millim.

*586 *a*. **Rhynchopyga hymenopteridia.**

Psilopleura hymenopteridia, Roths. Nov. Zool. xviii. p. 36 (1911), & xx. p. 471, pl. xiii. f. 42.

♂. Head and thorax chocolate-brown; legs paler red-brown, the coxæ white; abdomen crimson, the base, a slight dorsal stripe, and the two terminal segments chocolate-brown, the ventral valve white. Fore wing semihyaline tinged with red-brown; a diffused rounded chocolate-brown discoidal patch; the inner and apical areas suffused with chocolate-brown. Hind wing semihyaline tinged with red-brown; the apical area suffused with chocolate-brown.

Hab. Bolivia, Buenavista (*Steinbach*), type † ♂ in Coll. Rothschild. *Exp.* 28 millim.

*589 *a*. Rhynchopyga castra. (Plate IX. fig. 21.)

Rhynohopyga castra, D. Jones, Trans. Ent. Soc. 1912, p. 419.

♂. Head, thorax, and abdomen black-brown; palpi at base and sides of frons with some white; tegulæ white at dorsal and outer edges; shoulders with crimson spots; fore coxæ white, the fore and mid legs streaked with white on inner side; abdomen with subdorsal crimson patches on 2nd and 3rd segments, the anal segment with lateral white streak, the ventral surface crimson edged with white above towards extremity and at extremity, some white at base of ventral valve. Fore wing with the basal half black-brown, the terminal half fulvous brown; two hyaline streaks in cell and a streak below the cell; a yellow spot beyond the cell from just below costa to discal fold. Hind wing hyaline, the veins and margins black-brown, the costal and terminal areas suffused with brown.

♀. Shoulders without crimson spots, the palpi, fore coxæ, and legs without white; abdomen with white spots on the crimson subdorsal patches, the ventral surface brown with a crimson patch at base with a white bar on 2nd segment.

Hab. Brazil. Castro Paraña (*D. Jones*), type † ♂, ♀ in Coll. D. Jones. *Exp.*, ♂ 32, ♀ 34 millim.

*589 *b*. Rhynchopyga braconida. (Plate IX. fig. 22.)

Rhyncopyga braconida, Kaye, Entom. xliv. p. 143 (1911); id. Trans. Ent Soc. 1913, pl. 1. f. 8.

♂. Head, thorax, and abdomen black-brown with a slight bluish gloss; mid and hind femora white at extremities; abdomen with deep crimson bands on 2nd and 3rd segments and lateral patches at base, the ventral valve white at sides at base and followed by three crimson bands and some whitish sublateral marks. Fore wing dark brown with slight wedge-shaped hyaline mark in end of cell and orange-yellow patch beyond the cell from below costa to vein 5. Hind wing dark brown with semihyaline streaks in the interspaces.

Hab. Brazil, Santos, Alto da Serra (*Kaye*), type † ♂ in Coll. Kaye. *Exp.* 28 millim.

*590 *a*. Rhynchopyga semirufa. (Plate IX. fig. 23.)

Rhynchopyga semirufa, Druce, A. M. N. H. (7) xviii. p. 78 (1906).

♂. Head and thorax black; frons with bluish white lateral patches; patagia crimson; pectus and legs black, the coxæ white; abdomen crimson with broad black dorsal stripe, the ventral valve white. Fore wing black-brown, the interspaces to well beyond the cell hyaline irrorated with some black scales; some crimson at base.

Hind wing hyaline, the veins and margins black-brown, the terminal band expanding on apical area; the underside with the cell and costal area to beyond middle orange.

Hab. Peru (*Watkins*), type † ♂ in Coll. Joicey. *Exp.* 28 millim.

*590 *b*. **Rhynchopyga elongata**, Dogn., trans. from *Correbia*, no. 1142.

♂. Fore wing with the whitish patch at tornus almost obsolete.

Subsp. 1. Both sexes with broad rather oblique antemedial ochreous band from below costa to vein 1 crossed by dark streaks on the veins and a yellow band from costa beyond middle, towards which it narrows, to tornus; abdomen with the dorsal white spots defined by blackish.

Peru, Carabaya, San Domingo in Coll. Dognin.

*590 *c*. **Rhynchopyga dulcicordis**. (Plate IX. fig. 24.)

Mystrocneme dulcicordis, Dyar, J. N.Y. Ent. Soc. xv. p. 51 (1907).

♂. Head and thorax black-brown with some blue-white hair at base of palpi and beneath the tegulæ, the metathorax crimson; the sides of pectus with some crimson, the coxæ with some blue-white hair; abdomen crimson with black dorsal band at base. Fore wing red-brown, thinly scaled, the cell and submedian interspace on basal half with semihyaline streaks. Hind wing hyaline, the veins dark; the apical area suffused with brown; the cilia brown.

Hab. Mexico, Mexico City (*Müller*), type † ♂ in U.S. Nat. Mus. *Exp.* 32 millim.

*590 *d*. **Rhynchopyga bicolor**. (Plate IX. fig. 25.)

Saurita bicolor, Dogn. Ann. Soc. Ent. Belg. xlvi. p. 227 (1902).

♂. Head and thorax black with some bluish white on frons, back of head, prothorax, and front of pectus; coxæ white; legs streaked with white; abdomen orange-yellow, the dorsum black from a point on 2nd segment to extremity, lateral black stripes except at base, the ventral valve edged with white. Fore wing brown largely suffused with black; a white spot at base; a slight hyaline streak below base of cell; the cell hyaline with black streak in discal fold, a hyaline streak below the cell to middle of wing. Hind wing hyaline, the veins and terminal band black, the latter expanding to costa and in submedian fold.

♀. Hind wing crimson instead of yellow.

Hab. Argentina, Tucuman, type † ♂, ♀ in Coll. Dognin. *Exp.* 26 millim.

592 *a*. **Rhynchopyga steniptera.** (Plate IX. fig. 26.)

Rhynchopyga steniptera, Hmpsn. A. M. N. H. (8) iv. p. 346 (1909).

♀. Head, thorax, and abdomen black-brown. Fore wing very narrow and elongate; uniform black-brown. Hind wing slightly paler.

Hab. Br. Guiana (*Rodway*), 1 ♀ type. *Exp.* 24 millim.

*595 *a*. **Saurita improvisa.** (Plate IX. fig. 27.)

Saurita improvisa, Schaus, A. M. N. H. (8) ix. p. 36 (1912).

♀. Head black with some white hair; antennæ white at tips; thorax black, the dorsum yellow except in front, the tegulæ and patagia edged with white, the prothorax with white bar; coxæ with some white; abdomen orange with some black at sides at base. Fore wing hyaline clouded with fuscous brown on terminal area, the veins and margins black. Hind wing hyaline, the veins and margins black.

Hab. Costa Rica, Juan Vinas (*Schaus*), type † ♀ in U.S. Nat. Mus. *Exp.* 26 millim.

*596 *a*. **Saurita vatsoni.**

Saurita watsoni, Roths. Nov Zool. xviii. p. 37 (1911), & xx. p. 470, pl. xiii. f. 17.

♀. Head, thorax, and abdomen deep chocolate-brown; tegulæ and shoulders with crimson spots; pro- and metathorax and sides of coxæ with some metallic blue, the coxæ white in front; abdomen with crimson lateral spots at base, the terminal segments with metallic blue dorsal and lateral bars, the ventral surface white except at extremity. Fore wing deep chocolate-brown; a wedge-shaped hyaline patch in cell bifid at extremity and slight ante-medial streaks below the costa and cell; elongate hyaline marks above and below vein 6 and a small spot above vein 7; hyaline spots above and below vein 4. Hind wing metallic blue, the veins dark; a hyaline patch below base of cell; hyaline spots above and below vein 6 and between bases of veins 4, 3; a dark brown terminal band angled inwards at vein 5.

Hab. Panama, Chiriqui, Bogava (*Watson*), type † ♀ in Coll. Rothschild. *Exp.* 32 millim.

*598 *a*. **Saurita tijuca.**

Pseudomya tijuca, Schaus, P. Z. S. 1892, p. 275; id. Am. Lep. p. 4, pl. i. f. 3.

♀. Head black; tegulæ with grey and a few orange scales mixed; thorax orange; patagia edged with black; fore coxæ whitish; abdomen black with broad greyish subdorsal fasciæ, the ventral surface white except at extremity. Fore wing semihyaline

brownish, the veins black. Hind wing hyaline tinged with fuscous towards apex; the veins black. Fore wing with vein 6 from rather below angle of cell, 9 absent.

Hab. Brazil, Rio Janeiro, type † ♀ in U.S. Nat. Mus. *Exp.* 32 millim.

598 *b*. Saurita pellucida.

Pseudomya pellucida, Schaus, P. Z. S. 1892, p. 274; id. Am. Lep. p. 4, pl. i. f. 4.

Fuscous black; head and thorax with a few white hairs. Fore wing hyaline, the veins and markings black; suffused with smoky black to costa beyond middle and termen at vein 2. Hind wing hyaline, the veins and margins narrowly black; the costal area suffused with smoky black.

Hab. Brazil, Rio Janeiro, 1 ♀. *Exp.* 26 millim.

*598 *c*. Saurita hemiphæa. (Plate IX. fig. 28.)

Saurita hemiphæa, Dogn. Ann. Soc. Ent. Belg. liii. p. 215 (1909).
Saurita pipio, Oberth. Ét. Lep. Comp. vi. p. 329, pl. 127. f. 1132 (1912).

♂. Head, thorax, and abdomen black; frons and tegulæ with small metallic blue spots; shoulders with small white spots with larger crimson spots behind them; palpi white at base; pectus with blue spots at sides; coxæ and ventral surface of abdomen white. Fore wing with the basal half and inner area below vein 2 black, slight semihyaline streaks below base of cell and in its upper extremity, the rest of wing hyaline with the veins and termen black. Hind wing hyaline, the veins, inner margin towards tornus, and termen black. Underside of fore wing with the retinaculum white, a metallic blue streak in lower extremity of cell; hind wing with metallic blue on basal half of costa and in cell.

Hab. Fr. Guiana, Maroni, type † ♂ in Coll. Dognin; Peru. *Exp.* 24 millim.

599. Saurita attenuata, Hmpsn. A.M.N.H. (7) xv. p. 428 (1905).

Pseudomya tenuis, Butl. Ill. Het. B.M. i. p. 30, pl 17. f. 1 (1877), nec Butl. 1876.

599 *a*. Saurita ladan, Druce, trans. from *Cosmosoma*, no. 552.

*599 *b*. Saurita diaphana.

Saurita diaphana, Dogn. Ann. Soc. Ent. Belg. l. p. 179 (1906).

♂. Abdomen with large ventral valve.

Head, thorax, and abdomen black, the last with slight greyish segmental lines, the ventral valve slightly tipped with grey. Fore

wing semihyaline black, the veins and margins narrowly black. Hind wing semihyaline black, the veins and margins narrowly black, the inner area clothed with black hair.

Fig. 23.—*Saurita diaphana*, ♂. ½.

Hab. S.E. Peru, Carabaza, St. Domingo, type † ♂ in Coll. Dognin. *Exp.* 30 millim.

*600 *a*. **Saurita ochreiventris.** (Plate IX. fig. 29.)

Pseudomya ochreiventris, Dogn. Ann. Soc. Ent. Belg. xlvi. p. 227 (1902).

♀. Head and thorax brown, 1st joint of palpi, spots on sides of frons, basal joint of antennæ in front and short streaks on patagia orange, shoulders with some blue scales; pectus and base of legs orange; abdomen dark brown, two slight orange bars at base, lateral and subterminal blue patches, the ventral surface with orange bands on 2nd and 3rd segments, then wholly orange. Fore wing pale brown, the veins and streaks in cell and submedian fold dark, dark shades at end of cell, above base of vein 2, and on apical area. Hind wing pale fuscous brown, the veins and inner area darker.

Hab. Ecuador, type † ♀ in Coll. Dognin. *Exp.* 30 millim.

602 *a*. **Saurita intensa**, Wlk., trans. from *Cosmosoma*, no. 551.

602 *b*. **Saurita stryma**, Druce, trans. from *Cosmosoma*, no. 553.

*602 *c*. **Saurita lacteipars.** (Plate IX, fig. 30.)

Saurita lacteipars, Dogn. Hét. Nouv. Am. Sud., vii. p. 7 (1914).

♂. Head, thorax, and abdomen black-brown, the tegulæ, pectus below, shoulders, and basal segment of abdomen with paired crimson spots; fore coxæ with small white spots. Fore wing black-brown, semihyaline white streaks in and below end of cell; a creamy white patch from postmedial part of costa to termen between veins 5 and 2, its inner edge indented by short dark streaks on the veins. Hind wing hyaline, the veins and margins

black-brown, the terminal band expanding towards apex and into dentate marks below vein 2.

Hab. Colombia, Muzo (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 32 millim.

*602 *d.* **Saurita perspicua.** (Plate IX. fig. 31.)

Saurita perspicua, Schaus, Pr. U.S. Nat. Mus. xxix. p. 187 (1905).

♀. Head, thorax, and abdomen black-brown; shoulders and patagia with crimson patches; fore coxæ whitish in front; abdomen slightly tinged with blue; wings hyaline, the veins and margins dark brown. Fore wing with the base and inner area to near tornus rather broadly brown. Hind wing with a wedge-shaped patch of brown suffusion along vein 1 from termen to before middle.

Hab. Trinidad, type † ♀ in U.S. Nat. Mus. *Exp.* 30 millim.

*603 *a.* **Saurita gracula.** (Plate IX. fig. 32.)

Cosmosoma gracula, Dogn. Hét. Nouv. Am. Sud, ii. p. 5 (1911).

♂. Head and thorax black suffused with metallic blue; coxæ white; abdomen black with crimson dorsal patch at base and lateral metallic blue bands, some sublateral blue suffusion at base, the 2nd segment with white line, the ventral surface with white suffusion on terminal half except at extremity. Fore wing hyaline, the veins and margins black, the latter rather broadly; a crimson patch at base; a broad black discoidal band narrowing somewhat below the cell; the terminal band expanding very broadly on apical area, its inner edge angled inwards at vein 5, and expanding below 2 to meet the medial band. Hind wing hyaline, the veins and margins black, the narrow black terminal band expanding very broadly on apical area with slightly waved inner edge and expanding slightly below vein 2. Underside with some crimson at base of wings; hind wing with some blue irroration on medial part of the black costal area.

Hab. Colombia, Cali (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 32 millim.

603 *b.* **Saurita rubripuncta.** (Plate X. fig. 1.)

Saurita rubripuncta, Schaus, A. M. N. H. (8) vii. p. 178 (1911).

♀. Head, thorax, and abdomen black; frons, shoulders, and dorsum of thorax with metallic blue spots; pectus with white patches in front and at sides, the coxæ with white patches; abdomen with pair of subdorsal crimson spots at base and metallic blue lateral patches, the ventral surface with white segmental line on 2nd segment and patch on medial segments. Fore wing hyaline, the veins and margins black; the base black with a crimson patch;

a broad black band with slightly irregular edges from middle of costa to inner margin near tornus; the black terminal band expanding widely on apical area and below vein 2 confluent with the medial band. Hind wing hyaline, the veins and margins black, the terminal band expanding widely on apical area and angled inwards in submedian fold.

Hab. Costa Rica, Tuis (*Schaus*), 1 ♀. *Exp.* 34 millim.

604 *a*. **Saurita diffusa.**

Saurita diffusa, Schaus, A. M. N. H. (8) vii. p. 179 (1911).

Hind wing of male with the inner area very broad and dilated into a large lobe.

Head, thorax, and abdomen black; shoulders with crimson spots; frons, meso- and metathorax, pectus and fore coxæ with metallic blue patches; abdomen with crimson dorsal patch at base and

Fig. 24.—*Saurita diffusa*, ♂. ½.

subdorsal series of metallic blue spots except towards base, the medial segments with sublateral spots. Fore wing uniform black-brown. Hind wing fuscous brown, rather thinly scaled.

Hab. Costa Rica, Juan Vinas (*Schaus*), 1 ♂, 1 ♀. *Exp.*, ♂ 28, ♀ 34 millim.

606. **Saurita nox**, insert (syn.):—

Chrostosoma maratha, Druce, A. M. N. H. (7) iii. p. 229 (1899).

♀. Fore wing with the whitish band more defined and not diffused on inner side.

Ecuador, Sarayacu (*Buckley*), type † ♀ *maratha* in Coll. Joicey.

*607 *a*. **Saurita mosca.** (Plate X. fig. 2.)

Læmocharis mosca, Dogn. Ann. Soc. Ent. Belg. xli. p. 24 (1897).

♂. Head, thorax, and abdomen blue-black; abdomen with two dorsal magenta spots on 1st segment; wings hyaline, the veins and margins black, the black somewhat diffused. Hind wing with veins 2 and 4 rather strongly stalked.

Hab. Ecuador, Loja, type † ♂ in Coll. Dognin. *Exp.* 24 millim.

*607 *b*. Saurita hæmatica.

Glaucopis hæmatica, Perty, Del. Anim. Art. p. 156, pl. 31. f. 6 (1834).
Læmocharis zantes, Herr.-Schäff. Aussereur. Schmett. f. 240 (1853).
Saurita mediorubra, Kaye, Entom. 1911, p. 144.

♀. Head, thorax, and abdomen black-brown, the shoulders and dorsum of abdomen at base with crimson spots. Fore wing hyaline sparsely clothed with black hair-like scales, the veins and margins fuscous black, the black on termen expanding widely on apical area and slightly below vein 2. Hind wing hyaline sparsely clothed with black hair-like scales, the veins and margins black, the black on termen expanding on apical area and as a wedge-shaped patch above vein 1 to before middle.

Hab. Brazil, Santos, Guarujá (*D. Jones*), type † ♀ *mediorubra* in Coll. D. Jones. *Exp.* 34 millim.

*607 *c*. Saurita fumosa. (Plate X. fig. 3.)

Chrostosoma fumosa, Schaus, A. M. N. H. (8) ix. p. 35 (1912).

♂. Head, thorax, and abdomen black-brown, the patagia with crimson patches, the shoulders with crimson spots; mid and hind coxæ with small whitish spots; abdomen with dorsal crimson spot at base. Fore wing hyaline tinged with fuscous, the veins and margins black. Hind wing semihyaline fuscous, the veins black.

Hab. Costa Rica, Sixola R. (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 28 millim.

607 *d*. Saurita cryptoleuca. (Plate X. fig. 4.)

Saurita cryptoleuca, Hmpsn. A. M. N. H. (7) xi. p. 340 (1903).

♂. Black; vertex of head with metallic blue points behind ocelli; tegulæ with some blue scales; shoulders with vermilion points, metathorax with vermilion spot; abdomen with a few dorsal blue scales on 1st segment, the two penultimate segments with lateral spots and the last segment with dorsal patch. Fore wing with the cell hyaline intersected by the black discal streak, a hyaline fascia below the cell and slight marks just beyond its extremity. Hind wing with hyaline fascia below the cell extending just into and beyond it. Underside suffused with white except costal area of fore wing and cell and costal area to beyond middle of hind wing.

Hab. S. Brazil, Tijuca (*R. S. Wagner*), 1 ♂ type. *Exp.* 32 millim.

607 *e*. Saurita latens. (Plate X. fig. 5.)

Saurita latens, Schaus, A. M. N. H. (8) vii. p. 178 (1911).

Head, thorax, and abdomen black-brown, the shoulders with small crimson spots, the abdomen with triangular dorsal crimson

spot on basal segment. Fore wing and hind wing uniform black-brown.

Hab. Costa Rica, Juan Vinas (*Schaus*), type † ♂ in U.S. Nat. Mus., Tuis (*Schaus*), 1 ♀. *Exp.* 26 millim.

*607*f.* **Saurita submacula.** (Plate X. fig. 6.)

Saurita submacula, Schaus, A. M. N. H. (8) vii. p. 179 (1911).

♂. Head, thorax, and abdomen dark brown, the vertex of head with some metallic blue, the patagia with crimson patches. Fore wing uniform dark brown. Hind wing dark brown with pale crimson spot below base of cell, the underside with crimson patch at base with waved outer edge.

Hab. Costa Rica, Laguna (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 36 millim.

*609*a.* **Saurita tricolor.** (Plate X. fig. 7.)

Saurita tricolor, Schaus, Pr. U.S. Nat. Mus. xxix. p. 187 (1905).

♀. Head and thorax orange, palpi at tips, vertex of head, tegulæ and patagia with some black; antennæ black with white tips; tibiæ mostly black; abdomen orange with the last three segments black. Fore wing black with large orange medial somewhat triangular patch from below costa to above inner margin, indented by a black streak on median nervure, emitting a short orange streak below costa towards apex and its outer edge somewhat angled at vein 4. Hind wing orange, the apical area black, widely at costa, narrowing to a point at vein 1.

Hab. Fr. Guiana, St. Jean Maroni, type † ♀ in U.S. Nat. Mus. *Exp.* 26 millim.

*610*a.* **Saurita hilda.** (Plate X. fig. 8.)

Methysia hilda, Druce, A. M. N. H. (7) xviii. p. 79 (1906).

♂. Head black; thorax scarlet; pectus and legs black; abdomen black with the basal and base of 2nd segment scarlet. Fore wing fuscous black, the interspaces hyaline irrorated with fuscous scales; the terminal band expanding on apical area. Hind wing hyaline irrorated with fuscous, the veins and margins rather widely fuscous black.

Hab. Peru, La Oroya (*Ockenden*), type † ♂ in Coll. Joicey. *Exp.* 26 millim.

*612 *a*. **Saurita cretheis.** (Plate X. fig. 9.)

Dycladia cretheis, Druce, P. Z. S. 1883, p. 378; Kirby, Cat. Het. p. 145.

♂. Black-brown; thorax and 1st segment of abdomen scarlet above; abdomen blue-black above with lateral series of metallic blue points. Fore wing with two slight hyaline streaks in end of cell; a narrow wedge-shaped streak below the cell and a series of patches between bases of veins 2 to 7. Hind wing with hyaline streak in and beyond lower end of cell and a short streak beyond upper angle.

Hab. Ecuador, Sarayacu (*Buckley*), type † ♂ in Coll. Joicey. *Exp.* 26 millim.

615. **Saurita temenus,** insert (syn.) :—

Saurita venezuelensis, Klages, Pr. U.S. Nat. Mus. xxix. p. 538 (1906).

616. **Saurita concisa,** insert (syn.) :—

Saurita thoracica, Klages, Pr. U.S. Nat. Mus. xxix. p. 538 (1906).

Venezuela.

*617 *a*. **Saurita anthracina.** (Plate X. fig. 10.)

Saurita anthracina, Klages, Pr. U.S. Nat. Mus. xxix. p. 537 (1906).

♀. Head, thorax, and abdomen black; vertex of head with metallic blue spots and some whitish scales; tegulæ, shoulders, and mesothorax with paired metallic blue spots and some white scales, the metathorax with single spot; pectus with blue spots; legs black-brown; abdomen with dorsal and lateral lines and sublateral series of spots green turning to blue at base. Fore wing black-brown slightly suffused with metallic blue. Hind wing black-brown. Underside of fore wing with metallic blue streak on base of subcostal nervure and diffused streak on median nervure branching on veins 2, 3, 4; hind wing with diffused metallic blue streak on median nervure.

Hab. Venezuela, Suapure (*Klages*). *Exp.* 44 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

620. **Saurita bipuncta.**

Pupa. Jörgensen, Zeits. Wissens. Insektenbiol. ix. p. 33 (1913).

In a loose network cocoon formed of hairs.

622. **Saurita tipulina,** insert (syn.) :—

Saurita obscura, Klages, Pr. U.S. Nat. Mus. xxix. p. 538 (1906).

*622 *a*. Saurita lasiphlebia. (Plate X. fig. 11.)

Saurita lasiph'ebia, Dogn. Ann. Soc. Ent. Belg. l. p. 180 (1906).
Saurita culicina, Oberth. Ét. Lep. Comp. vi. p. 329, pl. 127. f. 1131 (1912).

♀. Head, thorax, and abdomen black-brown. Fore wing hyaline, the veins and costa with strong black-brown streaks formed of hairy scales; a fine terminal black-brown line; cilia brown. Hind wing hyaline, the veins black-brown; the termen with fine black-brown line, some diffused brown at discal fold and a large patch below vein 2 running up vein 1 halfway to base.

Hab. Fr. Guiana, St. Laurent Maroni, type † ♀ in Coll. Dognin; Brazil, Amazons, Pará. *Exp.* 24 millim.

622 *b*. Saurita melanifera.

Saurita melanifera, Kaye, Entom. xliv. p. 144 (1911).

Fore wing with vein 11 stalked with 7, 8, 9, 10.

♂. Head, thorax, and abdomen black; palpi with the 1st joint grey above; frons with lateral grey stripes and grey bar above; tegulæ, patagia, and metathorax slightly edged with grey; abdomen

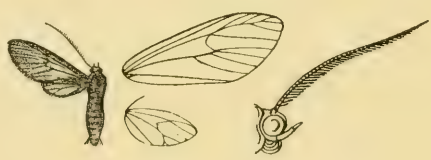

Fig. 25.—*Saurita melanifera*, ♂. ½.

with the 1st segment slightly edged with grey. Fore wing black, semihyaline except costal area and basal half of inner area. Hind wing black, semihyaline except the inner area.

Hab. Brazil, Corcovado Rio (*Kaye*), 1 ♂, Castro Paraña, Santos, Charujá, type † ♂ in Coll. Kaye. *Exp.* 26 millim.

Genus SAURITINIA.

Type.
Sauritinia, Dyar, Pr. U.S. Nat. Mus. xxix. p. 173 (1905) ..... *dubiosa*.

Proboscis fully developed; palpi upturned to vertex of head; antennæ of male bipectinate, the apex serrate; tibiæ with the spurs short. Fore wing long and narrow; vein 3 from well below angle of cell; 4, 5 from angle; 6 from upper angle; 7, 8, 9 stalked; 10, 11 from cell. Hind wing with the cell half the length of wing; veins 2, 3 from angle stalked to near termen, 4 from angle; 5 obsolescent from middle of discocellulars; 6, 7 from upper angle.

In key differs from *Chrysocale* in the thorax and abdomen being smoothly scaled.

622 *c*. Sauritinia dubiosa.

Sauritinia dubiosa, Schaus, Pr. U.S. Nat. Mus. xxix. p. 188 (1905).

Head black; thorax orange-red; legs black; abdomen black with the 1st segment orange-red. Fore wing black-brown, the end of

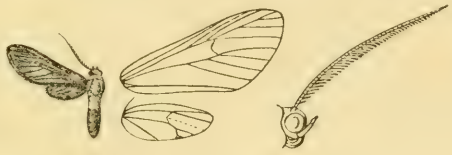

Fig. 26.—*Sauritinia dubiosa*, ♂. ½.

cell and area just below it rather thinly scaled, the veins darker. Hind wing black-brown with thinly scaled streak below the cell, the veins dark.

Hab. Fr. Guiana, St. Jean Maroni, 1 ♂; Brazil. Amazons. Pará, 1 ♀. *Exp.* 24 millim. Type † ♂ in U.S. Nat. Mus.

625. **Micragyrta diminuta**, insert (syn.):—

Agyrta ockendeni, Roths. Nov. Zool. xix. p. 163 (1912).

Peru, Carabaya, La Union (*Ockenden*), type † ♀ in Coll. Rothschild.

632 *a*. Eurota paraguayensis. (Plate X. fig. 12.)

Eurota hermione paraguayensis, Schrottky, Iris, xxiv. p. 150 (1910); Jörgensen, Zeits. Wissens. Insektenbiol. ix. p. 34 f. 2 (1913).

Head, thorax, and abdomen dark red-brown; tegulæ at sides and shoulders with yellowish white spots; coxæ yellow; abdomen with lateral crimson bar at base followed by a spot and subdorsal yellow spots on 4th and 5th segments, the ventral surface white except at extremity. Fore wing dark red-brown; a yellowish white spot at base of costa; a wedge-shaped hyaline patch in middle of cell with elongate mark below it and slight streak below submedian fold; five elongate hyaline postmedial spots between veins 7 and 2, the spot below vein 4 extending to near termen. Hind wing dark brown, the inner area crimson; a hyaline band beyond the cell with elongate mark below end of cell and vein 2 and small spot between the bases of veins 2 and 4.

Hab. Brazil, Castro Paraña (*D. Jones*), 2 ♂, 1 ♀; Paraguay, Puerto Bertoni (*Schrottky*), 1 ♂; Argentina, Missiones. *Exp.*, ♂ 24, ♀ 30 millim.

*633 *a*. **Eurota minerva**. (Plate X. fig. 13.)

Eurota minerva, Schaus, J. N.Y. Ent. Soc. ix. p. 41 (1901).

♀. Head, thorax, and abdomen black; tegulæ and base of patagia with yellow spots; abdomen with crimson lateral patches on 1st three segments followed by two yellow patches. Fore wing black-brown; a yellow spot at base; a medial white band formed by two spots in cell and two below it; a postmedial band of four spots between veins 7 and 3. Hind wing black-brown; the inner area crimson; two hyaline spots beyond the cell.

Hab. Brazil, Castro Paraña, type † ♀ in U.S. Nat. Mus. *Exp.* 32 millim.

*634 *a*. **Eurota tisamena**. (Plate X. fig. 14.)

Eurota tisamena, Dogn. Ann. Soc. Ent. Belg. xlvi. p. 227 (1902).

♂. Black-brown; shoulders with white spots, coxæ white; hind tibiæ streaked with white; abdomen with lateral tufts of crimson hair at base; paired subdorsal white spots on 1st two and two antepenultimate segments, sublateral and subventral series of spots. Fore wing with white spot at base; medial hyaline patches in and below the cell; a postmedial series of five spots between veins 7 and 2. Hind wing with hyaline patches below and beyond the cell, the inner area crimson.

Hab. Brazil, São Paulo, Paranapanema in U.S. Nat. Mus. *Exp.* 30 millim.

*634 *b*. **Eurota baeri**.

Eurota baeri, Roths. Nov. Zool. xviii. p. 37 (1911), & xx. p. 471, pl. xiii. f. 43.

♀. Head, thorax, and abdomen deep chocolate-brown; palpi with the 1st joint white, the 2nd crimson; antennæ white towards tips; tegulæ with crimson spots at sides; shoulders with white stripes; coxæ white; legs with some white; abdomen with lateral crimson maculate stripes, the 5th segment with slight subbasal white spots, sublateral white stripes except on terminal segments. Fore wing deep chocolate-brown; a small crimson spot below base of cell; hyaline spots in and below the cell towards its extremity; four postmedial hyaline spots between veins 7 and 3. Hind wing deep chocolate-brown; the base of inner area and a streak below the cell white; a hyaline postmedial patch between veins 7 and 2; the underside with the base of costal area and cell crimson.

Hab. Argentina, Tucuman (*Baer*), type † ♀ in Coll. Rothschild. *Exp.* 20 millim.

637 *a*. **Eurota xanthosoma**. (Plate X. fig. 15.)

Eurota xanthosoma, Hmpsn. A. M. N. H. (7) xv. p. 428 (1905).

♂. Head and thorax black-brown, the vertex of head, tegulæ, shoulders, and patches on fore coxæ and pectus orange-yellow;

abdomen orange, the anal tuft black below. Fore wing black, the basal area orange-yellow; a semihyaline white patch in terminal half of cell and a quadrate patch below it; an irregular postmedial series of semihyaline spots between veins 7 and 2, those above veins 4, 3 extending to near termen, and the one above vein 2 minute. Hind wing black, the base irregularly orange; a semihyaline white patch beyond the cell between veins 7 and 2.

Hab. Argentina, Gran Chaco near Florenzia (*S. R. Wagner*), 1 ♂ type. *Exp.* 30 millim.

637 *b*. **Eurota nigricincta.** (Plate X. fig. 16.)

Eurota nigricincta, Hmpsn. A.M.N.H. (7) xix. p. 226 (1907).

♂. Head and thorax black-brown; tegulæ yellow at sides; metathorax with yellowish white bar; pectus with yellow stripes below wings; abdomen orange, a dorsal black patch on 1st segment and dorsal bands on the other segments, the extremity black, a lateral series of black spots, the ventral surface yellowish white with black bands. Fore wing black-brown; a basal yellow patch with irregular outer edge angled inwards at vein 1; a wedge-shaped hyaline patch in end of cell and quadrate patch below the cell; a postmedial series of five hyaline spots between veins 7 and 2, the spots below veins 5, 4 extending to near termen and the spot below 3 minute and near termen. Hind wing black-brown; a small yellow patch at base with irregular outer edge; a hyaline patch beyond the cell between veins 7 and 2, the spots above veins 6 and 2 small.

Hab. Argentina (*O. W. Thomas*), 2 ♂ type. *Exp.* 28 millim.

638. **Eurota vulcanus,** insert (syn.) :—

Eurota descintes, Dyar, Pr. U.S. Nat. Mus. xliv. p. 234 (1913).

638 *a*. **Eurota plutonica,** n. sp. (Plate X. fig. 17.)

Endera vulcanus, Druce, Biol. Centr.-Am., Het. i. p. 43 (part.), nec Wlk.

♀. Head, thorax, and abdomen black; antennæ with some white scales towards tips; shoulders with white spots; coxæ and femora fringed with crimson hair; pectus with slight white spots at sides; abdomen with subdorsal series of white bars, lateral series of spots on basal half and sublateral series of bars, the lateral tufts of hair on terminal half and the anal tuft crimson. Fore wing black; a white spot at base of costa, slight hyaline subbasal streaks below costa and in cell and spot below the cell, a triangular spot in end of cell and rather oblique spot below base of vein 2, and elongate postmedial spots above veins 6, 5, 4, 3. Hind wing black with hyaline streak in the cell, elongate spot below the cell, postmedial

spots above and below discal fold, and a spot nearer termen between veins 2 and 4.

Hab. Mexico, Cuesta de Misantla (*Trujillo*), 1 ♀ type, Godman-Salvin Coll. *Exp.* 60 millim.

*641 *a*. Eurota elegans. (Plate X. fig. 18.)

Eurota elegans, Druce, A. M. N. H. (7) xviii. p. 78 (1906).

♂. Head and thorax black; tegulæ pale yellow; pectus with lateral crimson stripes; abdomen pale yellow, the base and broad lateral stripes on 2nd and 3rd segments crimson, the extremity black. Fore wing black; a pale yellow patch at base; quadrate hyaline spots in and below end of cell; a hyaline maculate band intersected by the black veins from below costa beyond middle to just before termen below vein 3. Hind wing black with pale yellow patch at base of costal area and crimson patch at base of inner area; a hyaline patch beyond the cell between veins 6 and 2.

Hab. Paraguay, type † ♂ in Coll. Joicey. *Exp.* 36 millim.

644. Eurota picta.

Larva. Jörgensen, Zeits. Wissens. Insectenbiol. ix. p. 74 (1913).

Yellow with white and black hairs and dark grey pencils of hair; head brown with dark markings. Food-plants: *Baccharis montevidensis*, *Calea bakeriana*, *Spilanthes uliginosa*, *Eupatorium alchemilla*, *Micania scandens*, *Argyreia megapotamica*; forms a yellowish cocoon of silk and hairs.

*644 *a*. Eurota parishi.

Eurota parishi, Roths. Nov. Zool. xviii. p. 37 (1911), & xx. p. 470, pl. xiii. f. 34.

♂. Head and thorax black; frons white; patagia with yellow patches at base; coxæ white; abdomen black, the basal and 4th segments with yellow and white bands, the extremity yellow, the ventral surface with the basal half banded yellow and white. Fore wing black; a quadrate hyaline antemedial spot below the cell, spots in and below the cell towards its extremity, and a postmedial series of four spots between veins 7 and 3. Hind wing black; a hyaline patch in and below the base of cell, and a postmedial patch between veins 7 and 2.

Hab. Cuba, Holguin (*Parish*), type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

645. Eurota strigiventris.

Larva. Jörgensen, Zeits. Wissens. Insectenbiol. ix. p. 35 (1913).

Bluish or dark ash grey, the 1st and last segments yellowish; somites 3 to 10 with pairs of blue-grey hair pencils; head yellow

with dark markings. Food-plants, *Senecio pinnatus* and *S. braziliensis*. Pupates in a thick cocoon of silk and hair.

645 *a*. **Eurota lætifica.**

Læmocharis lætifica, Mssn. Stübel's Reise S. Am., Lep. p. 129, pl. 4. f. 19 (1890).
Eurota strigiventris, subsp. 1, Hmpsn. Cat. Lep. Phal. B.M. i. p. 291.

646. **Eurota helena** del. *Læmocharis lætifica*.

*647 *a*. **Dycladia transacta.** (Plate X. fig. 19.)

Eurota transacta, Wlk. vii. 1615 (1856); Swinh. Cat. Het. Mus. Oxon. i. p. 59.

Very dark red-brown; head behind antennæ, tegulæ and shoulders with lateral orange marks; abdomen with subdorsal series of orange spots. Fore wing with slight more or less obsolescent hyaline antemedial streak in cell and larger streak below the cell; a postmedial series of elongate hyaline spots between veins 7 and 3, the spot above vein 3 extending nearly to termen. Hind wing with hyaline streak below the cell from near base and slight spots above veins 2 and 4.

Hab. Brazil, type † ♂ in Mus. Oxon. *Exp.* 24 millim. The locality 'China' is an error.

647 *b*. **Dycladia xanthobasis.** (Plate X. fig. 20.)

Dycladia xanthobasis, Hmpsn. A. M. N. H. (8) iv. p. 346 (1909).

♀. Head and thorax black-brown; palpi orange at base; back of head and shoulders with orange stripes; abdomen black-brown suffused with metallic blue on terminal segments, lateral orange fasciæ with serrate upper edge. Fore wing black-brown, the base orange; a wedge-shaped hyaline patch in basal half of cell and elongate patch below the cell; a hyaline band beyond the cell between veins 7 and 3 where it extends to near termen, leaving a round black-brown discoidal patch. Hind wing hyaline, the base orange, the veins, a discoidal spot, an apical patch, and the inner area except at base black-brown.

Hab. Br. Guiana (*Rodway*, *Bartlett*), 2 ♀ type. *Exp.* 26 millim.

*647 *c*. **Dycladia lydia.** (Plate X. fig. 21.)

Dycladia lydia, Druce, A. M. N. H. (7) vi. p. 64 (1900).

♀. Black-brown; palpi orange at base; back of head with orange patches; shoulders with orange stripes; abdomen with lateral orange stripes. Fore wing with small orange patch at base

of costa; a postmedial hyaline band from costa to vein 3 where it expands outwards to termen, edged with orange and orange at costa and termen. Hind wing with a little orange at base of inner margin; a hyaline fascia below the cell and above base of vein 2; the underside with some orange at base of costa.

Hab. Brazil, Porto Real (*Boucard*), type † ♀ in Coll. Joicey. *Exp.* 26 millim.

*649 *a*. Dycladia vitrina.

Dicladia vitrina, Roths. Nov. Zool. xviii. p. 37 (1911), and xx. p. 470, pl. xiii. f. 35.

♂. Head and thorax fulvous yellow with a brown stripe on vertex of head and dorsum of thorax, some blue on vertex of head; frons dark brown; palpi brown towards tips; antennæ blackish, white towards tips; legs brown, the coxæ with some blue, the femora streaked with yellowish; abdomen dark brown, subdorsal and lateral fulvous yellow patches on two basal segments, the other segments with subdorsal metallic blue patches. Fore wing hyaline, the base, costal and inner areas to beyond middle and veins fulvous yellow; a round dark brown discoidal patch with fulvous yellow patch below it between bases of veins 4 and 2; the terminal area with dark brown patches on apical area and towards tornus and fulvous yellow band at middle. Hind wing hyaline; the cell, costal area to beyond middle and base of inner area fulvous yellow; the veins beyond the cell brown; a brown terminal band expanding towards apex and on inner area.

Hab. Honduras, San Pedro Sula; Ecuador, R. Cayapas (*Flemming & Miketta*), type † ♂ in Coll. Rothschild, R. Durango. *Exp.* 34 millim.

653. Euchromia lethe.

Larva. Auriv. Ark. fur Zool. ii. 4, p. 33.

Reddish; head red; the 2nd and 3rd somites with paired dorsal tufts of long hair; 4th somite with paired dorsal dark warts and two lateral warts, 5th to 10th somites with triangular dorsal marks and dark lateral and sublateral warts, the 11th somite with subdorsal and lateral warts, the warts with orange-yellow hair.

654 *a*. Euchromia rubricollis, n. sp. (Plate X. fig. 22.)

Head and thorax black with patches of metallic blue; tegulæ fulvous red; palpi at base and frons at sides white; pectus and coxæ with white spots; abdomen black, an orange-yellow band at base, the two next segments with pale yellow and metallic blue bands, the 4th segment with fulvous red band and the terminal segments with metallic blue bands, the ventral surface with metallic blue bands and white band on 4th segment. Fore wing

black; a small wedge-shaped yellow spot in middle of cell and quadrate spot below the cell; rather elongate postmedial spots between veins 7 and 3. Hind wing black; wedge-shaped yellow spots in and below base of cell, a large spot beyond the cell and small spot between veins 2 and 4.

Ab. 1. Abdomen with the bands on 2nd and 3rd segments metallic blue; fore wing with the spots whitish tinged with yellow.

Hab. Sierra Leone, Kamagbonse (*Simpson*), 1 ♀ type; Gold Coast, Kumasi (*McDowall*), 1 ♂. *Exp.* 54 millim.

654. **Euchromia sperchia.** The name **guineensis** has priority, insert:—

Euchromia guineensis ab. *discifera*, Zerny, Iris, xxvi. p. 120 (1912).

Fore wing with the yellow patch below the cell semicircular. Congo, Stanleyville, Beni.

654 *b*. **Euchromia interrupta.** (Plate X. fig. 23.)

Euchromia sperchia ab. *interrupta*, Grünb. S.B. Ges. Naturf. 1910, p. 157.
Euchromia jacksoni, Beth.-Baker, A. M. N. H. (8) vii. p. 531 (1911).

Head, thorax, and abdomen black-brown with some metallic blue mixed; frons white below and at sides; pectus with white lateral patches; abdomen with subdorsal yellowish white patches on basal segment, orange-red dorsal and subdorsal patches on 4th segment, lateral and sublateral series of silvery blue patches, and ventral white band on 4th segment. Fore wing black-brown; a silvery blue spot below costa near base; a quadrate yellow antemedial patch below the cell with more or less developed mark above it in the cell; a postmedial band of four spots between veins 7 and 3. Hind wing black-brown; yellow patches in and below base of cell, and a patch beyond the cell expanding obliquely at extremity between base of veins 4, 2.

Hab. Congo, Katanga, Kambove (*Neave*), 1 ♂; Uganda, Victoria Nyanza (*Neave*), 1 ♀, Entebbe (*Neave*), 2 ♀, type † ♀ *jacksoni* in Coll. Bethune-Baker, Mpumu (*Neave*), 1 ♂. *Exp.* 50 millim. This is probably an aberration of *E. guineensis*.

656. **Euchromia polymena**, subsp. *orientalis*, insert:—

Charida elegantissima, Wllgrn. Eugenies Resa, p. 360 (1861),

which has priority, it is probably a distinct species.

Euchromia elegantissima var. *diffusihelvola*, Schultz, Philipp. J. Gen. Sci. p. 29, pl. 1. f. 3 (1908).

Fore wing brownish irrorated with yellowish especially towards termen.

Philippines, Manila.

657 *a*. **Euchromia collaris.** (Plate X. fig. 24.)

Euchromia collaris, Swinh. A. M. N. H. (7) xv. p. 496 (1905).

♂. Black; frons white; tegulæ yellow suffused with scarlet; vertex of head, tegulæ, and mesothorax suffused with metallic blue; pectus and fore coxæ with blue patches; mid and hind coxæ white; abdomen with some scarlet, yellowish and blue on 1st segment, metallic blue bands on two next segments and crimson bands on the five terminal segments, the ventral surface crimson except at base and extremity, the two subterminal segments with segmental black lines. Fore wing with some metallic blue at base and a discoidal lunule; a wedge-shaped hyaline spot in cell, the spots below base of cell and origin of vein 2 conjoined; elongate spots above veins 6, 4, 3, and a streak below 3 on left side only. Hind wing with hyaline basal patch conjoined below the cell to the patch beyond the cell leaving the veins and a discoidal lunule black.

Hab. Solomons, Shortland Is., 1 ♂ type. *Exp.* 52 millim.

662 *a*. **Euchromia epa.** (Plate X. fig. 25.)

Euchromia epa, Beth.-Baker, Nov. Zool. xv. p. 180 (1908).

Head and thorax black-brown, the vertex of head and patagia with some metallic blue; palpi with some white at base; frons and gulæ white; tegulæ and spots on shoulders yellow; coxæ white; abdomen black with six yellow bands, the bands on 2nd to 4th segments suffused with silvery white, the ventral surface with sublateral yellow spots on basal segment followed by four bands. Fore wing black with some metallic blue at base and on discocellulars; an oblong hyaline subbasal spot below the cell, an oblong spot in middle of cell with oblique patch below it and elongate postmedial spots above veins 6, 4, 3, and streak below 6. Hind wing black with metallic blue discoidal lunule, hyaline subbasal spots in and below the cell and oblique postmedial patch between veins 7 and 2.

Ab. 1. Tegulæ black suffused with metallic blue.

Ab. 2. Abdomen with the bands scarlet at sides and on ventral surface.

Hab. Br. N. Guinea, Ekeikei (*Pratt*), 5 ♂, 3 ♀. *Exp.* 50 millim.

663 *a*. **Euchromia plagosa.** (Plate X. fig. 26.)

Euchromia plagosa, Swinh. A. M. N. H. (7) xv. p. 495 (1905).

♀. Black; frons edged with white; vertex of head blue; tegulæ orange; patagia pale yellow with opalescent tints and edged with black; pectus with lateral white patches; fore coxæ blue; abdomen with the basal segment pale yellow, the 2nd and 3rd with lateral orange patches, the 4th and 5th with orange

bands, narrow ventrally, the terminal segments edged with blue. Fore wing with some metallic blue at base and a discoidal lunule; a wedge-shaped hyaline spot below base of cell, a quadrate spot in middle of cell and triangular spot below it; elongate spots above bases of veins 6, 4, 3. Hind wing with yellowish spot in base of cell; a blue discoidal patch; an oblique maculate postmedial band of three hyaline spots between veins 6 and 2.

Hab. New Britain, Kinigunang, 1 ♀ type. *Exp.* 46 millim.

668. **Euchromia dubia,** insert:—

Subsp. *fulgens,* Lathy, Entom. xxxii. p. 117 (1899).

♂. Frons white; shoulders with white points; coxæ white; head, thorax, and base of fore wing with more blue; abdomen with broad dorsal blue bands on all the segments beyond the yellow band; the lateral and ventral bands broad and conjoined.

Hab. New Guinea, Masor Is., 1 ♂ type. *Exp.* 48 millim.

668 *a*. **Euchromia dohertyi.** (Plate X. fig. 27.)

Euchromia dohertyi, Druce, A. M. N. H. (7) iii. p. 230 (1899).
Euchromia cœlipunctata, Lathy, Entom. xxxii. p. 117 (1899).

Black; frons and coxæ white; abdomen with dorsal crimson band on 1st segment, a lateral spot on 2nd segment, and lateral and ventral bands on the next three segments. Fore wing with small hyaline spot below base of cell; medial spots in and below the cell; a discoidal brilliant blue spot; hyaline spots beyond the cell above vein 6 and between veins 3 and 5. Hind wing with subbasal hyaline spots in and below the cell and on inner area; a discoidal blue point; a hyaline band beyond the cell extending to between veins 2 and 4 and to just above 6.

Hab. Buru, 1 ♂ type *cœlipunctata,* Kayeli (*Doherty*), 1 ♀. *Exp.* 42 millim. Type † in Coll. Joicey.

*668 *b*. **Euchromia brilliantina.**

Euchromia brilliantina, Roths. Nov. Zool. xviii. p. 38 (1911), & xx. p. 470, pl. xiii. f. 15.

♂. Head, thorax, and abdomen black, the head, thorax, and coxæ with some metallic blue; frons white at sides and below; abdomen with white band on basal segment and metallic blue bands on the other segments, the ventral surface with the 3rd, 4th, and 5th segments crimson. Fore wing black, the basal half and end of cell suffused with brilliant metallic blue; an elongate hyaline antemedial spot below the cell, medial spots in and below the cell, and postmedial spots above veins 6, 4, 3. Hind wing black, the end of cell brilliant metallic blue; a hyaline patch in and below base of cell and a postmedial maculate patch between veins 7 and 2.

Hab. Buru (*Doherty*), type † ♂ in Coll. Rothschild. *Exp.* 48 millim.

669 *a*. **Euchromia pratti.** (Plate X. fig. 28.)

Euchromia pratti, Beth.-Baker, Nov. Zool. xv. p. 181 (1908).

♂. Head and thorax black, the vertex of head, tegulæ, patagia, and prothorax with some metallic blue; frons white; shoulders with yellow spots; pectus with lateral white patches; abdomen black, the basal segment slightly irrorated with yellow, the next two segments with metallic blue bands and the two following with crimson bands, lateral yellow spots on 2nd segment, the ventral surface with crimson bands on three medial segments. Fore wing black with some metallic blue at base and on discocellulars; a small elliptical hyaline antemedial spot below the cell, a quadrate patch in middle of cell with oblique patch below it and elongate postmedial patches above veins 6, 4, 3, and streak below 6. Hind wing black with metallic blue striga on discocellulars; hyaline subbasal spots in and below the cell and an oblique postmedial patch between veins 7 and 2.

♀. Abdomen with orange band on 1st segment followed by silvery bluish-white bands on the two next segments.

Hab. Br. N. Guinea, Ekeikei (*Pratt*), 1 ♂. *Exp.* 50 millim. Type † ♀ in Coll. Bethune-Baker.

669 *b*. **Euchromia eceicei.** (Plate X. fig. 29.)

Euchromia ekeikei, Beth.-Baker, Nov. Zool. xv. p. 181 (1908).

Head and thorax black, the vertex of head, tegulæ, and patagia suffused with brilliant metallic blue; frons white; pectus suffused with blue, the coxæ with white spots; abdomen black with yellow band on 1st segment and metallic blue bands on two following segments, the ventral surface with metallic blue sublateral spots on 2nd segment and crimson patch on 3rd to 6th segments. Fore wing black with some brilliant metallic blue at base and on discocellulars; an elongate hyaline subbasal spot below the cell, quadrate patch in middle of cell with oblique patch below it and elongate postmedial patches above veins 6, 4, 3. Hind wing black with metallic blue discoidal striga; a hyaline patch at base in and below the cell and oblique postmedial band between veins 7 and 2.

Hab. Dutch N. Guinea, Fak-fak (*Pratt*), 1 ♂; Br. N. Guinea, Ekeikei (*Pratt*), 2 ♂, 2 ♀, Mafalu (*Pratt*), 2 ♀. *Exp.* 52 millim. Type † ♂ in Coll. Bethune-Baker.

670. **Euchromia iria**, insert (syn.) :—

Euchromia pelewana, Swinh. A. M. N. H. (7) xviii. p. 403 (1906).

Pelew Is., 1 ♂, 1 ♀ type.

672. **Euchromia creusa**, insert (syns.) : —

Euchromia shortlandica, Swinh. A. M. N. H. (7) xv. p. 496 (1905).
Euchromia salamonis, Swinh. A. M. N. H. (7) xv. p. 496 (1905).

Both forms have the basal segment of abdomen yellow; the former has the hyaline patches below the cell of fore wing conjoined and a hyaline streak below vein 6.

Hab. Solomons, Shortland and Isabel Is.

*672 *a*. Euchromia neglecta.

Euchromia neglecta, Roths. Nov. Zool. xviii. p. 38 (1911), & xx. p. 470, pl. xiii. f. 31.

♂. Head and thorax black; the vertex of head and tegulæ with some metallic blue; frons, gulæ, and patches at base of patagia white; coxæ and patches on pectus white; abdomen blackish, the basal segment with white band, the 2nd and 3rd segments with blue and white bands, the four following segments with crimson bands, the ventral surface with some white at base and five crimson bands. Fore wing black-brown with some metallic blue at base and two discoidal spots; an elongate hyaline antemedial spot below the cell, an elongate spot in end of cell with conical spot below it, and elongate postmedial spots above veins 6, 4, 3. Hind wing black-brown with hyaline patch in and below base of cell and postmedial patch between veins 7 and 2.

Hab. Solomons, Florida I. (*Meek*), type † ♂ in Coll. Rothschild, Guadalcanar, Bougainville, Isabel. *Exp.* 58 millim.

Subsp. *occidentalis*, Roths. Nov. Zool. xviii. p. 38 (1911), & xx. p. 470, pl. xiii. f. 33.

Abdomen with the bands on 2nd and 3rd segments bright metallic blue, the crimson bands on terminal segments narrower, the band on penultimate segment interrupted dorsally.

Hab. Solomons, Vella Lavella (*Meek*), type † ♂ in Coll. Rothschild, Kulambangra.

*672 *b*. Euchromia vahnesi.

Euchromia wahnesi, Roths. Nov. Zool. xviii. p. 38 (1911), & xx. p. 470, pl. xiii. f. 25.

♂. Head and thorax black, the vertex of head, tegulæ, and patagia suffused with brilliant metallic blue; frons, gulæ, coxæ, and patches on pectus white; abdomen black with crimson bands on six terminal segments, broader on ventral surface. Fore wing black, the base, inner area to beyond middle, and two spots on discocellulars metallic blue; an elongate hyaline antemedial spot below the cell, a wedge-shaped patch in end of cell with quadrate patch below it, and elongate postmedial spots above veins 6, 4, 3.

Hind wing black with hyaline patch in and below base of cell, and postmedial patch between veins 7 and 2.

Hab. German N. Guinea, Sattelburg (*Wahnes*), type † ♂ in Coll. Rothschild. *Exp.* 54 millim.

674 *a*. **Euchromia vitiensis.** (Plate X. fig. 30.)

Euchromia vitiensis, Hmpsn. A. M. N. H. (7) xi. p. 340 (1903).

Black; frons and coxæ in front white; vertex of head, tegulæ, patagia, and sides of pectus with patches of metallic blue; abdomen with orange-red bands on 1st and 4th segments dorsally and on 3rd and 4th ventrally and with dorsal, lateral and sublateral series of metallic blue spots. Fore wing with metallic blue spots at base and end of cell; an elongate hyaline antemedial spot below base of cell, quadrate spots in and below end of cell, and elongate spots above veins 2, 3, 4, and 6. Hind wing with hyaline patch at base in and below the cell; a metallic blue mark on discocellulars and a band beyond the cell between veins 7 and 2.

Hab. Fiji, 1 ♂, 3 ♀ type. *Exp.* 40 millim.

675 *a*. **Syntomeida hampsoni.** (Plate X. fig. 31.)

Syntomeida hampsonii, Barnes, Can. Ent. xxxvi. p. 165 (1904).
Syntomeida befana, Skinner, Ent. News Philad. xvii. p. 379 (1906).

♂. Head and thorax black tinged with blue green; palpi mostly orange; antennæ white at tips; tegulæ with orange patches; patagia orange with the shoulders and tips black; fore coxæ whitish in front, the tibiæ and tarsi greyish in parts; abdomen black with subdorsal orange patches, the 1st and last segments with dorsal patches, the ventral surface with orange bands except at extremity. Fore wing black-brown slightly tinged with green; a medial quadrate orange patch from subcostal nervure to vein 1; an oblique postmedial patch from below costa to near termen at vein 3. Hind wing black; a white basal patch edged with orange; an irregularly quadrate postmedial patch between veins 7 and 2.

Hab. U.S.A., Arizona, Pinal Co., Sta. Catalina Mts., 1 ♂ cotype, Babaquavaria Mts., 1 ♂. *Exp.* 40 millim.

*676 *a*. **Syntomeida austera.** (Plate X. fig. 32.)

Syntomeida austera, Dogn. Ann. Soc. Ent. Belg. xlvi. p. 228 (1902).

♀. Head, thorax, and abdomen black with a bluish gloss; fore coxæ in front and pectus at sides with white spots; abdomen with dorsal white bands on 1st two segments, followed by deep red bands on the next four segments. Fore wing black with a green gloss, the costal area tinged with purple; a slight hyaline streak below antemedial part of costa; a yellow point followed by two white ones at base; a yellow subbasal spot below the cell; a yellow postmedial point above vein 6. Hind wing black glossed with green, the interspaces of basal area hyaline.

Hab Paraguay, type † ♀ in Coll. Dognin. *Exp.* 42 millim.

677. **Syntomeida syntomoides**, insert (syn.) :—

Glaucopis amphitrite, Lucas, Sagra's Hist. of Cuba, Ins. p. 659 (1857).

= Ab. *angasi*. Thorax and abdomen wholly greenish black, type † in Coll. Oberthur.

680. **Syntomeida epilais**, insert :—

Subsp. *jucundissima*, Dyar, J. N.Y. Ent. Soc. xv. p. 226 (1907).

Greener; wings with the white markings smaller; legs with the markings smaller; abdomen with the extremity scarlet instead of crimson.

Hab. U.S.A., Florida, Miami (*Schaus*), 8 ♀, Palm Beach, Cocoanut Grove.

Page 310. For *Histiæa* read **Histiœa**.

687. **Histiœa cepheus**, insert (syn.) :—

Histiœa monticola, Klages, Pr. U.S. Nat. Mus. xxix. p. 538 (1906).

*689 *a*. **Histiœa falerina**. (Plate XI. fig. 1.)

Histiœa falerina, Druce, A. M. N. H. (7) xx. p. 506 (1907).

♂. Head, thorax, and abdomen black-brown; head behind antennæ and tegulæ with metallic blue spots; abdomen with lateral and sublateral series of metalic blue spots and dorsal bands on terminal segments. Fore wing black-brown; a small metallic blue spot below base of cell; a crimson streak below basal half of costa, a wedge-shaped patch in cell and two streaks in submedian interspace from near base to near termen, the upper streak obliquely bent downwards below vein 2 to join the lower streak; a metallic blue discoidal line; an oblique yellow band from below costa beyond middle to vein 3 near termen, where it ends in a point. Hind wing black-brown with a large crimson patch in lower part of cell and thence to near inner margin from near base to near termen confluent with a large postmedial patch, extending to just below costa, its outer edge oblique from below costa to vein 4, then excised to vein 1 where it is angled outwards, streaks of brown hair on it on vein 1 and in base of submedian fold. Underside of fore wing with a pale crimson fascia below the cell confluent with the patch in cell and expanding into a large hook at extremity, the yellow fascia ending below vein 4 just beyond angle of cell where it is slightly bent inwards; hind wing with crimson streaks below base of costa and in upper part of cell and bar across end of cell confluent with the patch below cell.

Hab. Peru, Marcapata, type † ♂ in Coll. Joicey. *Exp.* 72 millim.

*689 *b*. Histiœa hoffmannsi.

Histixea hoffmannsi, Roths. Nov. Zool. xviii. p. 39 (1911), & xx. p 470, pl. xiii. f. 22.

♂. Head, thorax, and abdomen brown; tegulæ, metathorax, and coxæ with metallic blue spots; abdomen with lateral series of slight metallic blue spots. Fore wing dark brown; a metallic blue spot below base of cell; a crimson streak below antemedial part of costa, a wedge-shaped patch in cell, and two fasciæ in submedian interspace from near base to near termen, the upper fascia arched; a broad oblique postmedial yellow band from below costa to vein 3 near termen; an oblique metallic blue striga on lower discocellular. Hind wing dark brown; an orange-yellow patch on terminal area between vein 6 and submedian fold with irregular inner edge.

Hab. Brazil, Amazons, R. Madeira, Humayta (*Hoffmanns*), type † ♂ in Coll. Rothschild. *Exp.* 64 millim.

695 *a*. Macrocneme aurifera, n. sp. (Plate XI. fig. 2.)

♀. Head and thorax black with patches of metallic green, the antennæ white at tips, the frons with lateral white spots, the dorsum of tegulæ with pair of white points; palpi at base, pectus and coxæ with white spots; the fore and mid tibiæ streaked with metallic green, the hair at extremity of hind tarsi white; abdomen black suffused with metallic green, subdorsal white spots on basal segment, lateral spots on 1st two segments, sublateral spots on 1st segment, and ventral spots on the other segments. Fore wing black suffused with brilliant metallic blue to termen except towards apex, leaving an oblique black fascia on inner basal area with a golden fascia above it. Hind wing black with a patch of brilliant metallic blue beyond lower angle of cell. Underside of fore wing suffused with brilliant metallic blue to submedian fold, extending to beyond upper angle of cell and below vein 3 to near termen; hind wing with white point at base, the costal area and upper part of cell metallic blue and the interspaces beyond and below end of cell with patches of blue.

Hab. Peru, La Merced (*Watkins*), 1 ♀ type. *Exp.* 40 millim.

*696 *a*. Macrocneme cœrulescens. (Plate XI. fig. 3.)

Macrocneme cœrulescens, Dogn. Ann. Soc. Ent. Belg. l. p. 180 (1906).

Black; antennæ white at tips; frons at side, base of palpi, tegulæ, fore and hind coxæ, and pectus at sides with white points; thorax with brilliant blue above; abdomen suffused with brilliant blue above with subdorsal and sublateral white points on 1st segment; the hind tarsi with the fringe at extremity white. Fore wing with white point at base of costa; two brilliant blue subbasal spots; a medial brilliant blue band occupying about one fourth of

wing. Underside of hind wing brilliant blue to just beyond the cell; a white point near base of costa.

Hab. Venezuela, Merida, type ♀ in Coll. Dognin; Brazil, 1 ♂ in Mus. Buenos Ayres. *Exp.* 42 millim.

696. **Macrocneme lades.**

Larva. Jörgensen, Zeits. Wissens. Insectenbiol. ix. p. 74 (1913).

Dark with sky-blue warts; forms a thick cocoon of silk and hair.

696 *b*. **Macrocneme guyanensis.** (Plate XI. fig. 4.)

Macrocneme guyanensis, Dogn. Hét. Nouv. Am. Sud, ii. p. 6 (1911).

♂. Head and thorax black-brown, the metathorax metallic bronze, and the tegulæ and base of patagia with some metallic green; palpi with white points at sides of 1st joint; frons with lateral white points; tegulæ with white points dorsally and at sides; pectus in front and behind and the coxæ with small white spots, the hind tarsi fringed with white hair above at extremity; abdomen metallic bronze, the basal segment with subdorsal, lateral, and two sublateral white points. Fore wing black-brown; white points at base below costa and cell; a subbasal metallic green spot below costa and an oblique fascia below basal half of cell; a metallic green fascia on inner margin from near base to near tornus; two metallic green streaks in end of cell and streaks above and below end of cell. Hind wing black-brown with slight white streak in base of cell and a few green streaks beyond its lower extremity. Underside of fore wing with metallic green suffusion in and above the cell; hind wing with metallic green suffusion on costal area and in upper part of cell to beyond middle.

Hab. Trinidad (*Kaye*), 2 ♂; Br. Guiana (*Rodway*), 1 ♂; Fr. Guiana, St. Laurent Maroni (*Le Moult*), type † ♂ in Coll. Dognin. *Exp.* 32 millim.

697 *a*. **Macrocneme semiviridis.** (Plate XI. fig. 5.)

Macrocneme semiviridis, Druce, A. M. N. H. (8) vii. p. 287 (1911).

Head and thorax black-brown, the mesothorax with pair of metallic blue spots, the patagia streaked with blue; palpi with the basal joint white; frons with lateral white points; antennæ with the shaft white towards tips; tegulæ with slight dorsal white marks; legs with metallic blue streaks, the coxæ with white spots; abdomen black suffused with metallic blue, the 1st two segments with lateral white spots, the ventral surface with white spots except on terminal segments. Fore wing with the basal half brilliant metallic blue, the terminal half black-brown. Hind wing brilliant metallic blue, the apical area and termen black-brown; the underside with small white spot at base.

Hab. Colombia (*Fassl*), 1 ♂, Choco Slopes, Rio Siato, type † ♀ in Coll. Joicey; Ecuador, Paramba, 1 ♀. *Exp.* 42 millim.

700. **Macrocneme chrysitis**, insert (syn.):—

Macrocneme affinis, Klages, Pr. U.S. Nat. Mus. xxix. p. 539 (1906).

VENEZUELA.

*700 *a*. **Macrocneme viridifusa.** (Plate XI. fig. 6.)

Macrocneme viridifusa, Schaus, Trans. Am. Ent. Soc. xxx. p. 135 (1904).

♀. Head, thorax, and abdomen black suffused with dark green; tegulæ at sides and middle with white spots; pectus with lateral white patches; abdomen with sublateral white patches on 1st two segments, the 1st ventral segment edged with white. Wings black-brown; fore wing with a white point at base, the veins, costal and inner areas suffused with sap-green.

Hab. BRAZIL, Castro Paraña (*D. Jones*), type † ♀ in U.S. Nat. Mus. *Exp.* 38 millim.

712. **Macrocneme indistincta** del. *M. cyllarus.*

712 *a*. **Macrocneme hampsoni.** (Plate XI. fig. 7.)

Macrocneme indistincta, ab. 1, Hmpsn. Cat. Lep. Phal. B.M. i. p. 324.
Macrocneme hampsoni, Schrottky, Iris, xxiv. p. 151 (1910).

♂. Head and thorax black, the sides of frons, gulæ, tegulæ at sides, shoulders and mesothorax with white spots, the back of head with some metallic blue, the patagia with streak of white and blue scales; antennæ white at tips; pectus with some metallic blue, fore coxæ and base of tibiæ streaked with blue, the hair at extremity of hind tarsi white; abdomen black suffused with metallic green, the ventral valve tipped with white and followed by sublateral white spots on four next segments. Fore wing black; subbasal metallic blue spots below costa and cell; the interspaces suffused with metallic blue-green from before middle to well beyond the cell. Hind wing black. Underside of fore wing with metallic blue suffusion at base of costal area and in and below the cell; hind wing suffused with metallic blue except on terminal area.

Hab. BRAZIL, Rio Grande do Sul (*Van Ihering*), 1 ♂; PARAGUAY. *Exp.* 40 millim.

*714 *a*. **Macrocneme sura.** (Plate XI. fig. 8.)

Macrocneme sura, Schaus, J. N.Y. Ent. Soc. ix. p. 42 (1901).

♂. Black; antennæ white at tips; frons, tegulæ, patagia, and metathorax with blue and white spots; legs striped with blue, hind tarsi white at extremity; abdomen dorsally golden green, the ventral valve green with black extremity, the ventral surface black

with sublateral series of four white points. Fore wing with subbasal series of brilliant blue spots; the interspaces suffused with golden green from before middle to beyond middle. The underside of both wings suffused with metallic green to beyond middle.

Hab. Brazil, Petropolis, type † ♂ in U.S. Nat. Mus. *Exp.* 38 millim.

*714 *b*. **Macrocneme occendeni.**

Poliopasta ockendeni, Roths. Nov. Zool. xviii. p. 40 (1911), and xx. p. 470, pl. xiii. f. 28.

♂. Head and thorax black-brown, the frons, vertex of head, tegulæ, and shoulders with white spots; mesothorax with pair of minute metallic blue streaks, the metathorax with blue spot; fore coxæ and the tibiæ tinged with blue, the hind tarsi fringed with white hair at extremity; abdomen black-brown tinged with blue and with dorsal and lateral blue streaks, the ventral valve edged with white and with lateral metallic blue spots. Fore wing black-brown suffused with metallic blue except on basal area; a white point at base and subbasal white points below costa and cell. Hind wing black-brown slightly suffused with metallic blue except towards base.

Fore wing with vein 10 from the cell.

Hab. Br. Guiana, Tumatumari; Peru, Carabaya, R. Huacamayo, La Union (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 44 millim.

714. **Macrocneme vittata**, insert (syn.):—

Macrocneme caurensis, Klages, Pr. U.S. Nat. Mus. xxix. p. 540 (1906).

Venezuela.

*717 *a*. **Macrocneme maroniensis.** (Plate XI. fig. 9.)

Macrocneme maroniensis, Schaus, Pr. U.S. Nat. Mus. xxix. p. 188 (1905).

♂. Black; frons and vertex of head with metallic blue spots; mesothorax with pair of blue points; gulæ white; shoulders with two white points; coxæ white in front; the ventral valve slightly edged with white followed by two white sublateral spots and slight segmental lines. Fore wing with white at base followed by blue points; a slight blue streak in cell. Underside of fore wing with blue suffusion on and below median nervure, the apical area suffused with whitish; hind wing with blue suffusion on costal area and in cell.

Hab. Fr. Guiana, St. Jean Maroni, type † ♂ in U.S. Nat. Mus. *Exp.* 26 millim.

718 *a*. **Macrocneme lamprosoma**, n. sp. (Plate XI. fig. 10.)

♂. Head and thorax black with metallic blue and white spots at sides of frons, on tegulæ, shoulders, and metathorax and streaks on patagia; antennæ white at tips; palpi with white points at base and some blue and white on 1st and 2nd joints; pectus and coxæ with white spots, the legs with blue streaks; abdomen brilliant silvery blue, the ventral valve tipped with white, the rest of ventral surface black with subventral series of white points. Fore wing black glossed with blue; a white point at base followed by three blue points; some blue suffusion on medial area in, above, and below the cell and a streak above vein 1. Hind wing black-brown slightly glossed with blue. Underside of both wings suffused with metallic blue to just beyond the cell, except on inner area.

♀. Without any of the white spots and points.

Hab. Panama, La Chorrera (*Dolby-Tyler*), 1 ♂, 1 ♀ type. *Exp.* 32 millim.

718 *b*. **Macrocneme cyllarus.**

Macrocneme cyllarus, Druce, A. M. N. H. (6) xviii. p. 29 (1896); id. Biol. Centr.-Am., Het. ii. p. 336, pl. 71, f. 2.

♀. Head and thorax black, the frons and vertex of head, tegulæ, shoulders, and metathorax with metallic blue patches, the patagia with metallic blue streaks; antennæ white at tips; coxæ with blue patches, the fore and mid tibiæ streaked with blue; abdomen black suffused with silvery blue and with silvery blue dorsal and lateral streaks. Fore wing black-brown with metallic blue subbasal points below costa and cell, streak on vein 1 and suffusion on medial and postmedial areas from costa to submedian fold. Hind wing black-brown. Underside of fore wing with metallic blue streak below base of costa and suffusion in and below end of cell. Hind wing with some blue suffusion on basal half, on costal area, and in the cell.

Hab. Panama, Chiriqui (*Champion*), 1 ♀, Tobago I. (*J. J. Walker*), 3 ♀. *Exp.* 32–36 millim.

*718 *c*. **Macrocneme nordina.** (Plate XI. fig. 11.)

Macrocneme nordina, Schaus, J. N.Y. Ent. Soc. ix. p. 41 (1901).

♀. Dull black; antennæ white at tips; frons, vertex of head, gulæ, tegulæ, patagia, meso- and metathorax with patches of metallic blue; coxæ and fore tibiæ in front blue; abdomen with lateral blue stripe. Fore wing with short blue stripe at base of inner margin. Underside of fore wing with blue streaks on basal half of costa and below cell; hind wing with blue streak on basal half of costa and short streaks in cell and on inner margin.

Hab. Mexico, Guadalajara, type † ♀ in U.S. Nat. Mus. *Exp.* 40 millim.

*718 *d*. **Macrocneme cyanescens.** (Plate XI. fig. 12.)

Macrocneme cyanescens, Dogn. Hét. Nouv. Am. Sud, v. p. 7 (1912).

♂. Head, thorax, and abdomen black; frons, tegulæ, shoulders, metathorax, pectus at sides, and fore coxæ with metallic blue spots; abdomen with dorsal and lateral series of metallic blue spots, the ventral valve metallic blue. Wings black-brown uniformly suffused with greenish blue; fore wing with some metallic blue at base.

Hab. Colombia, Medina (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 46 millim.

719 *a*. **Macrocneme nigricornis.** (Plate XI. fig. 13.)

Macrocneme nigricornis, Schrottky, Iris, xxvi. p. 166 (1912).

♂. Head, thorax, and abdomen black-brown; tegulæ at middle and sides with white spots; pectus with three white spots at sides; abdomen black-brown with pairs of subdorsal and lateral white spots at base, the ventral valve with a white bar at extremity and bar beyond it. Fore wing black-brown with a white spot at base of costa. Hind wing black-brown.

Hab. Argentina, Missiones, Bompland (*Joergensen*), 1 ♂. *Exp.* 32 millim.

Page 326. Under **Mydropastea** insert:—

Type.

Phaio, Neum. Can. Ent. xxvi. p. 334 (1894) ..... *longipennis*,

which has precedence.

721 *a*. **Phaio acquiguttata.** (Plate XI. fig. 14.)

Phaio acquiguttata, Dogn. Ann. Soc. Ent. Belg. liii. p. 216 (1909).

♂. Head and thorax black; tegulæ, shoulders, and metathorax with white spots; the mesothorax with black spots; sides of pectus and coxæ with white spots; abdomen black with paired dorsal white spots on 1st segment, subdorsal spots on 2nd and 3rd segments and metallic blue bands on 3rd to anal segments, the ventral valve white with sublateral spots on two following segments. Fore wing black-brown with some metallic blue at base; an elliptical hyaline spot below middle of cell with slight mark in cell above it; a small spot in upper part of cell towards extremity; small spots beyond the cell above and below vein 6 and larger spots nearer termen above and below vein 4. Hind wing black; a hyaline patch below the cell, small spot in lower extremity of cell and patch beyond the cell extending into the fork of veins 2 and 4,

all confluent except for the black veins; the underside with some metallic blue suffusion below base of costa.

♀. Metathorax without white patch; fore wing with the hyaline markings larger.

Hab. Colombia, type † ♂ in Coll. Dognin, Medina, 1 ♀, San Antonio (*Palmer*), 2 ♀; Ecuador, R. Pastaza. La Victoria, 1 ♀. *Exp.*, ♂ 42, ♀ 50 millim.

*722 *a*. **Phaio geminiguttata.** (Plate XI. fig. 15.)

Phaio geminiguttata, Dogn. Hét. Nouv. Am. Sud, ii. p. 7 (1911).

♀. Head and thorax black-brown; frons, tegulæ, meso- and metathorax with white spots; coxæ white, the hind tibiæ white on inner side; abdomen metallic green, the basal segment black-brown with a white dorsal patch, some white at base of sides, the ventral surface black-brown with white sublateral stripes. Fore wing black-brown, the basal half of costal area and the inner area below the cell and vein 2 suffused with metallic golden copper, the rest of wing slightly irrorated with coppery green; an elongate hyaline white mark in lower extremity of cell, an elliptical spot above base of vein 2, and postmedial spots above and below vein 4. Hind wing black-brown; an elongate hyaline white mark in lower extremity of cell, wedge-shaped mark below the cell from near base to extremity and spots beyond the cell above and below vein 4; the basal half of inner area white; the underside with the basal half of costal area and upper part of cell suffused with golden copper followed by slight metallic green suffusion.

Hab. Colombia, San Antonio, type † ♀ in Coll. Dognin. *Exp.* 46 millim.

722 *b*. **Phaio quadriguttata.** (Plate XI. fig. 16.)

Phaio quadriguttata, Dogn. Ann. Soc. Ent. Belg. liii. p. 216 (1909).

Head and thorax black, the tegulæ and shoulders with white spots; coxæ and extremities of mid and hind femora with white patches; abdomen brilliant metallic blue, the ventral surface black, a white dorsal band above and lateral and ventral white stripes except at extremity. Fore wing black suffused with metallic green, the apical area slightly irrorated with green; an elliptical hyaline spot below middle of cell, round spots in and beyond upper extremity of cell and beyond lower extremity. Hind wing black; a hyaline patch below the cell, two elongate marks beyond the cell and a small spot in fork of veins 2 and 4; the underside suffused with metallic blue.

Hab. Colombia, San Antonio (*Fassl*), 1 ♀; Ecuador, R. Numbala, type † ♂ in Coll. Dognin. *Exp.* 50 millim.

*725 *a*. Phaio unimacula.

Phaio unimacula, Roths. Nov. Zool. xviii. p. 39 (1911), & xx. p. 470, pl. xiii. f. 12.

♂. Head and thorax black; frons with lateral white spots; tegulæ and shoulders with white spots; coxæ with white patches, the tibiæ with white patches near base; abdomen black, the basal segment with paired dorsal and lateral white spots, the 2nd segment with lateral white spots, the other segments with diffused golden-green bands, sublateral series of white spots and a maculate yellow ventral fascia except at base and extremity. Fore wing dark brown suffused with golden-green scales especially on basal area. Hind wing black-brown suffused with golden-green scales except on inner area; a round hyaline subbasal spot below the cell; the hair on inner margin white.

Hab. Peru, Carabaya, St. Domingo (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 44 millim.

*725 *b*. Phaio longipennis. (Plate XI. fig. 17.)

Phaio longipennis, Neum. Can. Ent. xxvi. p. 335 (1894).

♂. Head, thorax, and abdomen black shot with blue; antennæ with the shaft orange except towards base, the branches orange towards apex; femora scarlet above, tibiæ and tarsi orange; pectus with scarlet patches at base of hind wings; wings fuscous black, the basal half of fore wing shot with blue.

Hab. Cuba, in U.S. Nat. Mus. *Exp.* 44 millim.

*725 *c*. Phaio cœruleonigra. (Plate XI. fig. 18.)

Phaio cœruleonigra, Schaus, Pr. U.S. Nat. Mus. xxix. p. 188 (1905).

♂. Head and thorax black tinged with metallic blue; 2nd joint of palpi, sides of frons, back of head, shoulders, coxæ, tibiæ and tarsi with white points; abdomen metallic blue-green, with dorsal and lateral white points on 1st segment and a ventral series. Fore wing black strongly shot with metallic blue-green leaving the veins, discal and submedian folds black. Hind wing black shot with blue-green.

Hab. Peru, Carabaya, type † ♂ in U.S. Nat. Mus. *Exp.* 40 millim.

727. Chrysocale regalis, insert:—

Var. 4-*punctata*, Dogn. Ann. Soc. Ent. Belg. xli. p. 23 (1897).

Fore wing without the hyaline point in end of cell and only two points beyond it. Hind wing with only the hyaline spot below the cell.

732. **Chrysocale ferens**, insert:—

Subsp. *quadruplex*, Dogn. Ann. Soc. Ent. Belg. l. p. 180 (1906).

Fore and hind wings with triangular hyaline patch below median nervure.

Colombia.

732 *a*. **Chrysocale corax**. (Plate XI. fig. 19.)

Chrysocale corax, Hmpsn. A. M. N. H. (7) viii. p. 171 (1901).

♀. Head, thorax, and abdomen deep black clothed with velvety pile; frons and vertex of head slightly tinged with blue; abdomen suffused with deep green on sides and ventral surface; wings deep metallic blue-green.

Hab. Peru, Huancabamba, 1 ♀, Vilcanota (*Garlepp*), 1 ♀ type. *Exp.* 50–54 millim.

*732 *b*. **Chrysocale gigas**.

Chrysocale gigas, Roths. Nov. Zool. xviii. p. 39 (1911), & xx. p. 470, pl. xiii. f. 18.

Fore wing with vein 10 stalked with 7, 8, 9.

♂. Head, thorax, and abdomen black-brown; antennæ with the shaft white above towards tips; legs tinged with metallic blue, the mid tarsi white at extremities, the hind tarsi white; abdomen with the ventral valve suffused with blue and followed by some whitish. Fore wing black-brown strongly suffused with metallic

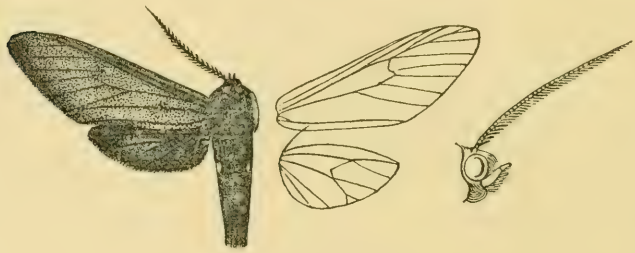

Fig. 27.—*Chrysocale gigas*, ♂. ½.

blue, the basal costal area, apical area, and termen slightly suffused; a white point at base. Hind wing black-brown with some metallic blue suffusion beyond lower angle of cell; the underside wholly suffused with metallic blue.

Hab. Colombia, Bogotá; Ecuador, Zamora; Peru, Carabaya, St. Domingo (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 64 millim.

737 *a*. **Calonotos triplaga.** (Plate XI. fig. 20.)

Calonotos tripunctata, Hmpsn. Cat. Lep. Phal. B.M. i. p. 335 (part.).
Calonotos triplaga, Hmpsn. A. M. N. H. (8) iv. p. 346 (1909).

♂. Black; frons with pair of white patches; tegulæ with two small dorsal white spots; prothorax with two metallic green patches, metathorax with one patch; sides of pectus, coxæ, and extremities of femora with white spots; abdomen with paired subdorsal and lateral small white spots, the other segments with broad dorsal and lateral golden-green stripes, the ventral surface with white stripe. Fore wing with white point at base of costa; a metallic green streak below basal half of costa and wedge-shaped patch below base of cell; an elliptical medial semihyaline spot below the cell and round patch beyond its extremity; a slight green mark below extremity of cell. Hind wing with elliptical semihyaline white spot beyond the cell; the underside with metallic green streak below costa to beyond middle and patch in cell.

♀. Fore wing with postmedial hyaline spot below vein 3.

Hab. Fr. Guiana, Nouveau Chantier; Brazil, Amazons, Mañaos (*Scholz*), 1 ♂ type. *Exp.* 38 millim.

*737 *b*. ?**Calonotos verdivittata.** (Plate XI. fig. 21.)

Poliopastea verdivittata, Klages, Pr. U.S. Nat. Nus. xxix. p. 541 (1906).
Poliopastea verdivittata var *fenestrata*, Klages, Pr. U.S. Nat. Mus. xxix. p. 542 (1906).

♀. Head, thorax, and abdomen black; frons, streaks behind antennæ, spots on neck, at middle of patagia, and on pectus and coxæ white; spots on tegulæ, shoulders, a dorsal streak on mesothorax, and patch on metathorax golden green; abdomen with broad dorsal, lateral, and sublateral golden green stripes, the basal segment with subdorsal white streaks and the lateral stripes commencing at 2nd segment. Fore wing black; a white point at base of costa; a short subbasal hyaline streak below costa; a broad golden green streak below base of cell. Hind wing black. Underside of fore wing with golden green streaks in the cell; hind wing with broad golden green streaks below base of costa and in cell.

Ab. 1. *fenestrata*. Fore wing with round hyaline spot below middle of cell and a rather oblique postmedial series of spots in the interspaces between veins 7 and 3, the veins between them streaked with white; hind wing with hyaline spot beyond the cell above and below vein 4.

Hab. Venezuela, Suapure (*Klages*), Ciudad Bolivar (*Klages*). *Exp.* 42 millim. This species is unknown to me, figured from drawing from type in U.S. Nat. Mus.

*738 *a*. Calonotos longipennis.

Calonotos longipennis, Roths. Nov. Zool. xviii. p. 40 (1911), & xx. p. 470, pl. xiii. f. 27.

Hind wing on underside with the terminal area clothed with rough scales.

♂. Head and thorax black; frons with lateral white spots; tegulæ with dorsal white spots; mesothorax with paired metallic green spots; shoulders with white spots; fore coxæ with white patches, the mid and hind femora with white spots at extremities, the fore and mid tibiæ with short metallic green streaks; abdomen black, the basal segment with subdorsal white spots; dorsal and subdorsal silvery green stripes and sublateral stripes on terminal

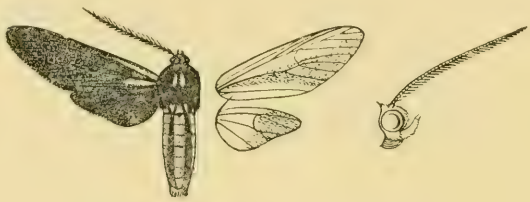

Fig. 28.—*Calonotus longipennis*, ♂. ¦.

segments, a ventral series of white spots. Fore wing black-brown; a white spot at base of costa; a metallic green streak below antemedial part of costa and fascia below base of cell. Hind wing uniform black-brown; the underside with metallic green stripes below basal half of costa and in upper part of cell.

Hab. Surinam, Maroewym Valley, Aroewarwa Creek (*Klages*), type † ♂ in Coll. Rothschild *Exp.* 50 millim.

*738 *b*. Calonotos opalizans.

Calonotos opalizans, Roths. Nov. Zool. xviii. p. 40 (1911), & xx. p. 470, pl. xiii. f. 26.

♂. Head and thorax black-brown; frons with lateral white points; abdomen opalescent golden-green, the ventral surface dark brown with greenish stripe on three basal segments. Fore wing black-brown with some metallic blue below antemedial part of costa; a slight whitish spot below middle of cell and a white spot beyond upper angle of cell. Hind wing uniform black-brown; the underside with pale metallic green streaks below basal half of costa and in upper part of cell.

Hab. Venezuela, Ciudad Bolivar (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 44 millim.

*739 *a*. **Calonotos chlorota.** (Plate XI. fig. 22.)

Calonotos chlorota, Dogn. Hét. Nouv. Am. Sud, vii. p. 8 (1914).

♂. Head and thorax black with patches of metallic blue; palpi with some white in front; frons with lateral white spots above; tegulæ with white points at dorsal and outer edges; pectus and coxæ with white patches; abdomen silvery metallic blue, the basal segment black with small subdorsal and lateral white spots, the ventral surface white except at extremity. Fore wing black, the basal half suffused with metallic blue; a white point at base of costa. Hind wing black with some metallic blue irroration and some suffusion below the cell except towards base; some white at base of costa; the underside suffused with metallic blue except the termen.

Hab. Colombia, Yuntas, type † ♂ in Coll. Dognin. *Exp.* 36 millim.

740. **Calonotos chryseis**, insert:—

Eupyra dorata, Dogn. Ann. Soc. Ent. Belg. xli. p. 23 (1897),

which has priority.

♂ with a hyaline point in upper angle of fore wing and a spot above vein 3.

*740 *a*. **Calonotos antennata.**

Calonotos antennata, Roths. Nov. Zool. xviii. p. 39 (1911), & xx. p. 470, pl. xiii. f. 13.

Antennæ of male with long branches.

♂. Head and thorax black-brown; frons with lateral white spots; antennæ with the shaft white above towards tips; tegulæ with dorsal white spots; pectus and coxæ with white spots, the fore tibiæ with short white streaks in front, the mid and hind

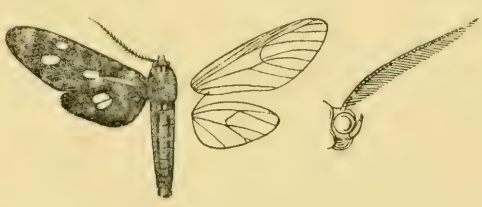

Fig. 29.—*Calonotus antennata*, ♂. ½

femora with white spots at extremities; abdomen black-brown, the basal segment with dorsal and lateral white spots, the other segments with golden yellow dorsal, lateral, and sublateral stripes except at extremity, the ventral surface with white stripe on 2nd to 4th segments. Fore wing black-brown; a white spot at base

of costa; a slight antemedial golden yellow streak on subcostal nervure and a fascia below the cell; a rounded hyaline medial spot below the cell and spots above base of vein 6 and below vein 4. Hind wing black-brown; a hyaline spot beyond the cell bisected by the discal fold; the underside with the basal half of costal area and the cell golden yellow.

Hab. Venezuela, Merida (*Briceno*), type † ♂ in Coll. Rothschild. *Exp.* 44 millim.

*740 *b*. **Calonotos plumulata.** (Plate XI. fig. 23.)

Calonotos plumulatus, Klages, Pr. U.S. Nat. Mus. xxix. p. 541 (1906).

♂. Head, thorax, and abdomen black-brown; frons whitish at sides; antennæ with the shaft white at tips; pectus and coxæ with white spots, the mid and hind femora white at tips; abdomen with subdorsal white streaks and lateral spots on 1st segment, the other segments with broad dorsal and lateral golden green stripes, sublateral golden green stripes on seven basal segments and a ventral series of white spots. Fore wing black-brown with metallic green streak below costa to beyond middle and short broad streak below base of median nervure. Hind wing black-brown. Underside of fore wing with short metallic green streak at base, another beyond middle and a short streak above the cell; hind wing with broad metallic green streaks in and above base of cell.

Hab. Venezuela, Suapure. *Exp.* 50 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

Genus **PSEUDOPHAIO**, nov.

Type, *Poliopasta rosenbergi*.

Proboscis fully developed; palpi upturned, the 2nd joint reaching to vertex of head, the 3rd short; antennæ of male with the basal half of shaft slightly fringed with hair above; thorax clothed with hairy scales; tibiæ and tarsi smoothly scaled; abdomen smoothly scaled. Fore wing long and narrow, the termen obliquely curved; vein 3 from before angle of cell; 4, 5 from angle; 6 from upper angle; 7, 8, 9, 10 stalked; 11 from cell. Hind wing with the cell long; vein 2 from well before end of cell; 3, 4 from angle; 5 from just above angle; 6, 7 from upper angle.

In key differs from *Mesolasia* in the antennæ having the basal half of shaft slightly fringed with hair above; fore wing with vein 10 from the cell.

*744 *a*. **Pseudophaio rosenbergi.**

Poliopasta rosenbergi, Roths. Nov. Zool. xviii. p. 40 (1911), & xx. p. 470, pl. xiii. f. 19.

♂. Head and thorax black-brown; frons with lateral white spots; fore coxæ with white patches, the mid and hind femora with white spots at extremities, the tibiæ with metallic blue streaks; abdomen black-brown with dorsal and lateral series of metallic blue spots, the two basal segments with small dorsal white spots, the ventral surface with broad white bands except at

extremity. Fore wing black, the basal half suffused with brilliant metallic green. Hind wing black suffused with brilliant metallic green except the terminal area, irregularly from apex to vein 2; a small hyaline patch below base of cell. Underside of fore wing

Fig. 30.—*Pseudophaio rosenbergi*, ♂. $\frac{1}{1}$.

with the basal costal area and the inner area suffused with metallic green; hind wing almost entirely suffused with metallic green.

Hab. Ecuador, Paramba, type † ♂ in Coll. Rothschild. *Exp.* 50 millim.

748 *a*. **Mesolasia pyroproctis**, n. sp. (Plate XI. fig. 24.)

♀. Head and thorax black; patagia with white spots at base; hind coxæ with white spots; abdomen black, the basal and three terminal segments fulvous orange. Fore wing hyaline, the veins and margins black; an oblique black discoidal bar from the costal area to above vein 2, rounded below; the terminal black band with its inner edge slightly waved and dentate at submedian fold; the submedian fold and interspaces of terminal area between veins 8 and 4 with black streaks. Hind wing hyaline, the veins and margins black; a black discoidal bar conjoined to the costal area; the terminal black band expanding slightly towards apex and below vein 2 where its inner edge is angled inwards below veins 2 and 1.

Hab. Peru, Yahuaimayo, 2 ♀ type. *Exp.* 62 millim.

*749 *a*. **Mesolasia analis**. (Plate XI. fig. 25.)

Æthria analis, Schaus, J. N.Y. Ent. Soc. ix. p. 42 (1901).

♀. Head, thorax, and abdomen black; pectus and coxæ slightly tinged with blue; abdomen with the terminal segments scarlet, orange ventrally. Fore wing hyaline, the veins and margins rather broadly black; the basal area black with slight blue patches; a broad discoidal black bar conjoined to the costal fascia; the terminal band even with minutely waved inner edge. Hind wing hyaline, the veins and margins black; the terminal band broad and slightly dentate inwards at submedian fold.

Hab. Peru, type † ♀ in U.S. Nat. Mus. *Exp.* 36 millim.

*749 *b*. Mesolasia felderi.

Mesolasia felderi, Roths. Nov. Zool. xviii. p. 41 (1911), & xx. p. 470, pl. xiii. f. 29.

♂. Head and thorax dark brown; shoulders and coxæ with white spots; abdomen dark brown, the three terminal segments and anal tuft crimson. Fore wing hyaline, the veins, the margins rather narrowly, and streaks in the interspaces of terminal area from below apex to vein 3 black-brown; a metallic blue point below base of cell; a discoidal black bar conjoined to the costal area; the terminal band expanding slightly below vein 2. Hind wing hyaline, the veins and margins black; a rather narrow terminal black band expanding somewhat towards apex.

Hab. Brazil, type † ♂ in Coll. Rothschild. *Exp.* 48 millim.

752 *a*. Trichura fulvicaudata. (Plate XI. fig. 26.)

Trichura fulvicaudata, Lathy, Entom. xxxii. p. 118 (1899).

♂. Head, thorax, and abdomen black; palpi in front, frons, vertex of head, gulæ, tegulæ, patagia, thorax, and pectus with patches of metallic blue-green; coxæ orange; abdomen with dorsal and lateral series of blue-green spots, the terminal half of anal appendage orange, the 1st two segments orange on ventral surface and the next segment with sublateral spots. Fore wing hyaline yellow, the veins and margins black; a discoidal bar conjoined to the costal fascia; the terminal band with its inner edge somewhat crenulate. Hind wing white; the inner area black; an apical black patch narrowing to a point at vein 2.

Hab. Paraguay, 1 ♂ type. *Exp.* 42 millim.

755. **Trichura latifascia**, subsp. *ismene*, insert (syn.):—

Trichura monstrabilis, Klages, Pr. U.S. Nat. Mus. xxix. p. 542 (1906).

*755 *a*. Trichura pusilla.

Trichura pusilla, Roths. Nov. Zool. xviii. p. 157 (1911), & xix. p. 377, pl. v. f. 34.

♂. Head, thorax, and abdomen black-brown suffused with metallic blue; palpi white in front; coxæ white; abdomen with lateral white patches on 2nd segment and the ventral surface white at base. Fore wing hyaline, the veins and margins black-brown; a narrow black discoidal bar; the terminal band narrow and with slightly sinuous inner edge. Hind wing hyaline, the veins and margins black-brown; the inner area black-brown; the black on termen expanding on apical area.

Hab. Peru, Chanchamayo, type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

*756 *a*. Trichura grandis.

Trichura grandis, Kaye, Entom. xliv. p. 144 (1911); id. Trans. Ent. Soc. 1913, pl. i. f. 1.

♀. Head, thorax, and abdomen black-brown, the palpi at base, tegulæ at sides, and metathorax with slight metallic blue marks; mid and hind coxæ with white spots; abdomen with blue point at base, lateral series of points, whitish ventral patch on 2nd segment, and sublateral spots on 3rd segment. Fore wing hyaline yellow, the veins and margins black-brown; a black discoidal bar; the terminal band slightly angled inwards at vein 2. Hind wing hyaline, the veins and margins black; the inner area black; the terminal band expanding on apical area.

Hab. Brazil, Santos, Guarujá (*Kaye*), type † ♀ in Coll. Kaye. *Exp.* 50 millim.

*761 *a*. Trichura fasciata.

Trichura fasciata, Roths. Nov. Zool. xviii. p. 41 (1911), & xx. p. 470, pl. xiii. f. 30.

♀. Head yellow, a slight bar above frons and the back of head dark brown; antennæ blackish; thorax dark brown mixed with yellow; coxæ yellow with some metallic blue at sides; legs yellow, blackish towards base, and the extremities of hind tibiæ and the tarsi blackish; abdomen black-brown with seven yellow bands and slight dorsal streak at extremity, the ventral surface black-brown with the 2nd segment white with sublateral white spots on the two following segments. Fore wing yellowish hyaline; the veins yellow with brown scales; the margins black-brown; the terminal band expanding somewhat towards apex and very slightly below vein 2. Hind wing hyaline, the veins yellow with brown scales, the inner area yellow; a narrow terminal black-brown band expanding somewhat towards apex and emitting a wedge-shaped streak on vein 1 to before middle.

Hab. Peru, Chanchamayo (*Schunke*), type † ♀ in Coll. Rothschild. *Exp.* 44 millim.

*765 *a*. Pezaptera chapmani. (Plate XI. fig. 27.)

Hyaleucerea chapmani, Klages, Pr. U.S. Nat. Mus. xxix. p. 552 (1906).

♂. Head and thorax fuscous brown; abdomen fuscous brown with subdorsal series of large scarlet patches from 4th to terminal segments, the lateral anal tufts scarlet. Fore wing hyaline, the veins, and margins rather broadly, fuscous brown; a fuscous brown discoidal patch conjoined to the costal fascia; the terminal band expanding widely on apical area and slightly below vein 2. Hind wing hyaline, the veins and margins fuscous brown; the inner area fuscous brown; the terminal band expanding towards apex.

Hab. Venezuela, Suapure. *Exp.* 26 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

Genus **HOMONEURONIA**.

Type.

Homoneuronia, Dyar, Pr. U.S. Nat. Mus. xxix. p. 174 (1905) ... *modesta*.

Proboscis fully developed; palpi upturned to above vertex of head; antennæ of male bipectinate, the apex serrate; tibiæ with the spurs short; abdomen with the 2nd segment constricted. Fore wing with vein 2 from well before angle of cell; 4 absent; 5 from well above angle; 6 from upper angle; 7, 8, 9, 10, 11 stalked. Hind wing with the cell extremely long; veins 2, 3 from a point and meeting at termen. 4, 5 from angle; 6, 7 from upper angle; the inner area normal.

In key differs from *Æthria* in the fore wing having vein 4 absent; hind wing with veins 2, 3 from a point and meeting at termen.

*765 *a*. **Homoneuronia modesta.**

Homoneuronia modesta, Schaus, Pr. U.S. Nat. Mus. xxix. p. 188 (1905).

♂. Head, thorax, and abdomen black shot with brilliant blue; palpi in front and sides of frons white; gulæ white; coxæ in front and pectus at sides with white spots; abdomen with the constricted 2nd segment white at sides and below, followed by a ventral band on 3rd segment. Fore wing hyaline, the veins and margins rather narrowly black; some blue suffusion at base;

Fig. 31.—*Homoneuronia modesta*, ♂. $\frac{1}{1}$.

a black discoidal bar. Hind wing hyaline, the veins, costa and inner margin black; an apical black patch, rather wide at costa, narrowing to a point at vein 1, its inner side slightly irregular.

Hab. Fr. Guiana, St. Jean Maroni, type † ♂ in U.S. Nat. Mus. *Exp.* 34 millim.

*766 *a*. **Æthria sanctula.** (Plate XI. fig. 28.)

Æthria sanctula, Dogn. Hét. Nouv. Am. Sud, ii. p. 7 (1911).

♀. Head, thorax, and abdomen black-brown, the last with the terminal segments crimson. Fore wing hyaline, the veins and margins black, the latter rather broadly, the fascia on inner margin expanding at base; a broad black discoidal bar confluent with the black on costa; the interspaces of terminal area with black streaks to below vein 5; the terminal band expanding somewhat below vein 2. Hind wing hyaline, the veins and margins black, the latter broadly; the broad terminal band with its inner edge incurved below vein 2.

Hab. Brazil, Santos, type † ♀ in Coll. Dognin. *Exp.* 40 millim.

768. **Æthria carnicauda**, insert (syn.) :—

Æthria innotata, Schaus, Trans. Am. Ent. Soc. xxx. p. 135 (1904).

Male similar to female; the type came from Rio Janeiro, not Pará.

768 *a*. **Æthria aner**. (Plate XI. fig. 29.)

Æthria carnicauda, Hmpsn. Cat. Lep. Phal. i. p. 349 (♂), nec Butl.
Æthria aner, Hmpsn. A. M. N. H. (7) xv. p. 428 (1905).

♂. Head, thorax, and abdomen black; palpi in front, sides of frons, basal joint of antennæ below, and patches on shoulders and fore and mid coxæ white; abdomen with dorsal series of brilliant blue bands, the anal tuft crimson, the ventral surface of 1st three segments white followed by slight sublateral spots and a spot at base of anal tuft. Fore wing hyaline, the veins and margins black, the base metallic blue, the basal area black with irregular oblique outer edge; a black discoidal bar; the terminal black band expanding slightly below vein 2. Hind wing hyaline, the veins black; the apical area black, broadly at costa, narrowing to a point at vein 1.

Hab. Venezuela, Caura Valley (*Klages*), 2 ♂ type. *Exp.* 30 millim.

774. **Æthria leucaspis**, insert (syn.) :—

Æthria langleyi, Klages, Pr. U.S. Nat. Mus. xxix. p. 543 (1906).

Venezuela.

775. **Æthria daltha**, insert (syn.) :—

Æthria eliza, Klages, Pr. U.S. Nat. Mus. xxix. p. 543 (1906).

Venezuela.

778 *a*. **Æthria frigida**, Burm., trans. from *Trichura*, no. 762.

*779 *a*. **Paræthria flavosignata**.

Paræthria flavosignata, Roths. Nov. Zool. xviii. p. 41 (1911), & xx. p. 470, pl. xiii. f. 38.

♂. Head yellow, the antennæ and streaks behind them black-brown; palpi black above; tegulæ yellow with black-brown spots; thorax black-brown with yellow streaks on upper edge of patagia and dorsum; pectus in front and fore coxæ yellow, the mid and hind coxæ white; abdomen black-brown with dorsal yellow streak on basal segment followed by a series of triangular patches, the patches on two terminal segments tinged with crimson, lateral series of white spots except at base and extremity, the ventral surface white except at extremity. Fore wing hyaline, the veins and margins black-brown, two yellow points at base, a slight streak below basal half of costa, and a diffused oblique streak above

middle of inner margin; a black-brown discoidal bar; the terminal band expanding rather widely on apical area, its inner edge angled inwards at veins 5 and 2. Hind wing with the basal half of inner area white, with dark streaks on vein 1 and inner margin and sinuous outer edge, the costal area and terminal half black-brown. Underside with the inner area of fore wing and costal edge of hind wing white.

Hab. Brazil, Matto Grosso, in Coll. D. Jones; Bolivia, Chimate (*Simons*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

*773 *b*. Paræthria angustipennis.

Paræthria angustipennis, Roths. Nov. Zool. xviii. p. 41 (1911), & xx. p. 470, pl. xiii. f. 37.

♂. Head and thorax black; palpi white in front; frons with lateral white spots; tegulæ and shoulders with metallic blue spots, some diffused blue on dorsum; white spots below shoulders and on coxæ, the tibiæ suffused with blue; abdomen black with diffused dorsal metallic blue bands, the 2nd segment white at sides, the ventral surface with the basal half white. Fore wing hyaline, the veins, and margins rather broadly, black-brown; some metallic blue at base of costa; a narrow black discoidal bar conjoined to the costal area; the terminal band expanding somewhat towards apex. Hind wing hyaline, the veins and margins black; the costal area broadly black; the terminal band expanding towards apex; the underside with white fascia from base through the cell to just beyond it.

Hab. Brazil, Amazons, Itaituba (*Hoffmanns*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

*780 *a*. Argyroeides rubricauda.

Argyroeides rubricauda, Dogn. Hét. Nouv. Am. Sud, ii. p. 8 (1911).

Hind wing of male with the costal area very much reduced and narrow, veins 6, 7 strongly stalked; abdomen slightly constricted near base.

Fig. 32.—*Argyroeides rubricauda*, ♂. ½.

♂. Head and thorax deep reddish brown, the tegulæ with crimson line at base; palpi blackish with some white at base; antennæ blackish with some white on shaft towards tips; coxæ white, the femora streaked with white below; abdomen black-

brown with lateral yellow fasciæ suffused with crimson except at base, expanding on terminal segments and leaving a dark dorsal streak only, the ventral surface suffused with white. Fore wing hyaline, the veins black, the margins red-brown, the subcostal nervure streaked with yellowish on basal half; a black discoidal bar; the red-brown on termen expanding on apical area and defined on inner side by black. Hind wing hyaline, the veins and margins black; some whitish below costa; the inner area suffused with brown except towards base; the underside with the costal area brown, the inner area golden yellow except towards base.

Hab. Colombia, Monte Socorro, type † ♂ in Coll. Dognin. *Exp.* 34 millim.

*780 *b*. **Argyroeides quindinensis.** (Plate XI. fig. 30.)

Argyroeides quindinensis, Dogn. Hét. Nouv. Am. Sud, iii. p. 4 (1911).

♂. Head, thorax, and abdomen blackish brown; shoulders with white spots; abdomen with broad lateral orange-red fasciæ, the ventral surface red-brown, Fore wing hyaline with a few brown scales; the veins red-brown; the costal and inner areas red-brown, the former ochreous towards base; a large red-brown discoidal spot conjoined to the costal area; the terminal area red-brown, expanding towards apex and below vein 2. Hind wing hyaline; the veins black-brown; the inner area suffused with black-brown; the costa towards apex and the cilia red-brown; the underside with the costal area ochreous.

Hab. Colombia, Paramo del Quindin, type † ♂ in Coll. Dognin. *Exp.* 36 millim.

*783 *a*. **Argyroeides auranticincta.** (Plate XI. fig. 31.)

Argyroeides auranticincta, Klages, Pr. U.S. Nat. Mus. xxix. p. 544 (1906).

♂. Head orange; antennæ black, the basal joint orange in front; the vertex of head with pair of black spots behind and sometimes a spot in front; thorax black, the edges of tegulæ and patagia and a spot on metathorax orange; pectus and legs orange, the latter with black streaks and the coxæ orange-yellow; abdomen black, the 1st segment with some orange hair on dorsum and at sides and the extremity orange, the back of 2nd segment and front of 3rd naked, the other segments with orange bands narrower on 3rd and 7th segments, anal tufts crimson, ventral surface orange-yellow. Fore wing hyaline yellow, the veins and margins narrowly black with some yellow scales on the veins; a yellow spot at base sometimes with a crimson point on it; an orange streak below costa to beyond middle; a narrow black discoidal bar conjoined to the black on costa; the black on termen slightly expanding towards apex. Hind wing hyaline yellow, the veins and margins narrowly black with some yellow scales on the veins; the lobe of inner

margin clothed with orange hair; the black on termen slightly expanding towards apex.

Hab. Venezuela, Suapure (*Klages*). *Exp.* 26 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

785 *a*. **Argyroeides notha.** (Plate XI. fig. 32.)

Argyroeides notha, Schaus, A. M. N. H. (8) vii. p. 179 (1911).

♂. Head and thorax black; frons white; pectus with lateral white spots; femora white; fore tibiæ with crimson streak; abdomen brown suffused with metallic green, the 2nd segment unscaled, the terminal segments crimson at sides, segments 3 to 5 and the two terminal segments with ventral crimson bands. Fore wing hyaline, the veins and margins narrowly black; a crimson spot at base and a small spot on termen below vein 2. Hind wing hyaline, the veins and margins narrowly black; the lobe of inner margin clothed with black hair; the terminal band expanding somewhat towards apex.

Hab. Costa Rica, Juan Vinas, Alafuega (*Schaus*), 1 ♂. *Exp.* 30 millim.

*787 *a*. **Argyroeides affinis.**

Argyroeides affinis, Roths. Nov. Zool. xviii. p. 41 (1911), & xx. p. 471, pl. xiii. f. 3.

♂. Head and thorax black with a few whitish scales, the upper edge of patagia with scarlet streak; lower part of frons white; pectus and coxæ with white spots; abdomen black, the 2nd segment white at sides and below, the four terminal segments with dorsal scarlet bands, the ventral surface with white bands on three penultimate segments. Fore wing hyaline, the veins and margins narrowly black; a black point at origin of vein 5. Hind wing hyaline, the veins and margins narrowly black; a slight black discoidal bar; the inner area and a small apical patch black.

Hab. Brazil, Minas Geraes, type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

789 *a*. **Argyroeides flavicincta.** (Plate XII. fig. 1.)

Argyroeides flavicincta, Druce, A. M. N. H. (7) xv. p. 461 (1905).
Argyroeides suapurensis, Klages, Pr. U.S. Nat. Mus. xxix. p. 545 (1906).

♂. Head, thorax, and abdomen black; palpi in front, frons and a line behind eyes yellowish white; vertex of head and edges of tegulæ and patagia with yellowish scales; coxæ whitish; abdomen with the extremity of 1st segment and greater part of the constricted 2nd segment yellowish, the other segments with fine yellow

terminal lines; the ventral surface with yellowish white bands on four terminal segments. Wings yellowish hyaline, the veins and margins narrowly black; hind wing with the minute inner area black.

Hab. Venezuela, Caura Valley (*Klages*), 10 ♂. *Exp.* 28 millim.

*790 *a*. Argyroeides fuscipes.

Argyroeides fuscipes, Roths. Nov. Zool. xviii. p. 42 (1911), & xix. p. 375, pl. iii. f. 11.

♂. Head and thorax black-brown, the vertex of head with slight bluish gloss; tegulæ with dorsal white points; palpi with white points at base; coxæ with small white spots; abdomen black-brown, the terminal segments with slight greyish segmental lines, the 2nd segment with yellowish band and the ventral surface yellow. Fore wing hyaline, the veins and margins narrowly black-brown. Hind wing hyaline, the veins and margins narrowly black, the inner area black.

Hab. Brazil, Minas Geraes, type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

*793 *a*. Argyroeides flavicornis.

Argyroeides flavicornis, Roths. Nov. Zool. xviii. p. 42 (1911), & xx. p. 470, pl. xiii. f. 23.

♂. Head and thorax black-brown; antennæ fulvous, the basal half of shaft black; palpi yellow in front except towards base; coxæ and fore femora in front white, the mid and hind femora with yellowish streaks; abdomen black-brown, the terminal segments dorsally glossed with blue, the 1st segment with yellowish spots at sides, the 2nd segment with lateral white streaks and the ventral surface white, the 3rd with lateral and sublateral white spots. Fore wing hyaline with a fulvous tinge, the veins and margins narrowly brown; a yellow streak below costa and two above inner margin. Hind wing hyaline, the veins and margins narrowly black-brown; a slight black discoidal bar; the inner area black. Underside of fore wing with the costal area yellow; hind wing with two yellow streaks below costa.

Hab. Brazil, Amazons, Teffé (*M. de Mathan*), type † ♂ in Coll. Rothschild. *Exp.* 42 millim.

*794 *a*. Argyroeides spectrum. (Plate XII. fig. 2.)

Argyrœides spectrum, Schaus, A. M. N. H. (8) vii. p. 180 (1911).

♀. Head, thorax, and abdomen black-brown; pectus and mid and hind coxæ with white patches; legs tinged with yellow; abdomen with lateral white streaks on two basal segments and ventral fascia. Fore wing hyaline, the veins and margins narrowly yellowish tinged

with black; an orange streak below costa; a terminal black band from apex to below vein 5 and small spot at vein 2. Hind wing hyaline, the veins yellowish; the termen with black band from apex narrowing to a point below vein 3, then narrowly black; the inner margin black.

Hab. Costa Rica, Mt. Poas (*Schaus*), type † ♀ in U.S. Nat. Mus. *Exp.* 28 millim.

795 *a*. **Argyroeides vespina**. (Plate XII. fig. 3.)

Argyroeides vespina, Schaus, J. N.Y. Ent. Soc. ix. p. 42 (1901).
Argyroeides lydia, Druce, A. M. N. H. (7) xi. p. 197 (1903).

♂. Head, thorax, and abdomen black; palpi yellow; sides of frons, a bar on vertex of head and gulæ in front yellow; tegulæ, patagia, and metathorax edged with yellow; pectus and legs yellow, the fore tibiæ with some black in front; abdomen with paired oblique yellow streaks on 1st two segments and segmental bands on the last four, the ventral surface with the constricted segment yellow and the bands on terminal segments broader. Wings yellowish hyaline, the veins and margins narrowly yellow and brown.

Hab. Brazil, Rio Grande do Sul, type † *lydia* in Coll. Joicey, Castro Paraña, type † ♂ in U.S. Nat. Mus.; Paraguay (*Schrottky*), 1 ♂. *Exp.* 28 millim.

795 *b*. **Argyroeides nephelophora**, n. sp. (Plate XII. fig. 4.)

♀. Head and thorax black; palpi, sides of frons, a band on vertex of head, gulæ, edges of tegulæ and patagia, and a patch on metathorax orange-yellow; pectus and legs yellow, the femoro-tibial joints black; abdomen black with subdorsal yellow streaks on lateral patches on basal segment and segmental lines on terminal segments, the ventral surface yellowish towards base. Fore wing hyaline, the veins and margins narrowly yellow and brown; a yellow-brown cloud below the cell at bases of veins 2 and 3, and a cloud filling the upper angle of cell and extending on costal area to near apex. Hind wing hyaline, the veins and margins narrowly brown; a yellow-brown cloud filling the upper end of cell and extending on costal area to apex.

Hab. Paraguay (*Bertoni*), 1 ♀ type. *Exp.* 32 millim.

Page 361. For *Gundlachia* (nec Pfeiff. Moll. 1849) read **Burtia**.

800 *a*. **Hypocladia restricta**. (Plate XII. fig. 5.)

Hypocladia restricta, Hmpsn. A. M. N. H. (7) viii. p. 172 (1901).

♂. Head and thorax black-brown; antennæ white at tips; vertex of head and shoulders with pairs of crimson patches; coxæ and stripes on legs white; abdomen black with lateral crimson patch on 1st two segments; the ventral surface white to near extremity. Fore wing black-brown with a purplish tinge; slight semihyaline streaks in and below middle of cell, and short streaks beyond the

cell between veins 3 and 7, those between veins 3 and 5 longer. Hind wing black with semihyaline streaks in and below the cell and between bases of veins 2 to 6.

Hab. Panama, La Chorrera (*Dolby-Tyler*), 1 ♂ type. *Exp.* 30 millim.

800 *b*. **Hypocladia parcipuncta.** (Plate XII. fig. 6.)

Hypocladia parcipuncta, Hmpsn. A. M. N. H. (8) iv. p. 347 (1909).

♂. Head, thorax, and abdomen black-brown; palpi with slight white marks at base; shoulders with crimson patches; coxæ white; abdomen with pair of dorsal crimson spots at base and ventral white patches except on terminal segments. Fore wing black-brown with semihyaline streaks in and below middle of cell and postmedial streaks between veins 7 and 2. Hind wing black-brown with hyaline streaks in and below cell and in the interspaces beyond it; the inner margin with some white hair.

Hab. Br. Guiana (*Rodway*), 1 ♀ type. *Exp.* 30 millim.

800 *c*. **Hypocladia elongata.** (Plate XII. fig. 7.)

Hypocladia elongata, Druce, A. M. N. H. (7) xv. p. 461 (1905).

Head and thorax pale brown with darker streaks on sides of tegulæ and patagia and vertex of thorax; back of head with pale reddish patches; coxæ and greater part of femora, spurs and tarsi crimson; abdomen pale brown with darker subdorsal spots, the lateral and ventral areas crimson except on terminal segments, the base of lateral areas yellow. Fore wing pale brown with diffused subbasal blackish band; a maculate antemedial band leaving the veins pale; a round dark spot in middle of cell and slight medial streaks above and below vein 1; a large rounded blackish discoidal patch extending to costa and connected with inner margin by an irregular band, the veins remaining pale, a whitish quadrate patch before it in cell and small spot below the cell and an oblique irregular patch beyond it between veins 7 and 2 with a blackish patch on its outer edge below costa; a series of elongate dark spots in interspaces of terminal area. Hind wing white; the veins brown; a brown discoidal lunule; a brown terminal band with irregular inner edge, on inner area extending to base leaving some yellowish hair on inner margin.

Hab. Venezuela, Caura Valley (*Klages*), 1 ♂, 4 ♀. *Exp.* 42 millim.

*800 *d*. **Hypocladia calita.** (Plate XII. fig. 8.)

Hypocladia calita, Dogn. Hét. Nouv. Am. Sud, ii. p. 9 (1911).

♂. Head and thorax grey-white; palpi black-brown frons with brownish patch; antennæ blackish, the basal joint yellow, a slight black streak between their bases; a yellow patch at back of head; tegulæ with blackish patches at middle and sides; blackish streaks

on outer edge of patagia and dorsum of thorax; femora crimson, the tibiæ grey banded with blackish, the tarsi crimson with the basal joint black, yellow at base; abdomen yellow with dorsal series of black spots except on basal segment, the terminal segment banded black and white, the anal tuft blackish streaked with whitish, a lateral series of black spots, the ventral surface tinged with crimson. Fore wing white, the costal and inner areas tinged with yellowish on basal half; subbasal black spots below costa and cell and above inner margin; an antemedial series of four black points, incurved below the cell; a short black spot in middle of cell and black points above and below vein 1; a broad blackish brown band from costa beyond middle to inner margin and termen towards tornus, the veins on it streaked with yellowish, its inner edge angled inwards at median nervure and outwards at vein 2; a maculate brown band from costa towards apex to middle of termen, interrupted at vein 5; a rounded brown apical patch; a waved yellowish subterminal line from vein 3 to tornus. Hind wing white, the inner area tinged with yellow; a fuscous terminal band expanding towards costa; the underside with the costal area at base yellow suffused with crimson, then blackish.

Hab. Colombia, Cali (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 42 millim.

Page 363. Genus **DESMIDOCNEMIS**, rename

HYALOMIS, Hmpsn. A. M. N. H. (7) xv. p. 429 (1905).

*804 *a*. **Hyalomis espia.** (Plate XII. fig. 9.)

Desmidocnemis espia, Dogn. Ann. Soc. Ent. Belg. xli. p. 24 (1897).

♂. Head, thorax, and abdomen black, the head and thorax with some grey and ochreous scales; patagia with brownish streaks; pectus and coxæ yellow; legs striped with orange-yellow; abdomen shot with green, subdorsal orange bands on four medial segments, the last complete dorsally, ventral surface yellow; wings hyaline, the veins and margins narrowly black. Fore wing with the costal nervure, the costa just beyond middle, and the inner margin dull orange; the terminal band expanding on apical area. Hind wing with the costa white.

Hab. Ecuador, Loja, type † ♂ in Coll. Dognin. *Exp.* 26 millim.

Page 364. Genus **DIPTILON**, insert:—

Type.

Æthriopsis, Schrottky, Iris, xxiv. p. 151 (1910) for Sect. II. ... *philocles*.

805 *a*. **Diptilon flavipalpis.** (Plate XII. fig. 10.)

Diptilon flavipalpis, Hmpsn. A. M. N. H. (8) viii. p. 395 (1911).

♂. Head and thorax black; palpi orange, the 3rd joint black; frons ochreous white; gulæ orange-red; vertex of head with

ochreous streaks conjoined behind; tegulæ, patagia, and dorsum of thorax with brownish streaks; legs streaked with yellow and black, the hind tibiæ and tarsi orange; abdomen black with some yellow and brown hairs, the first three segments with dorsal yellow patches and their ventral surface ochreous white. Fore wing hyaline, the veins and margins narrowly black. Hind wing black with the fold and tuft white.

Hab. Argentina, La Rioja (*Giacomelli*), 1 ♂ type. *Exp.* 24 millim.

805 *b*. **Diptilon proleuca.** (Plate XII. fig. 11.)

Diptilon proleuca, Druce, A. M. N. H. (7) xv. p. 462 (1905).

♂. Head, thorax, and abdomen black slightly shot with blue; palpi in front, sides of frons, a line behind eyes, two spots on back of head, sides of tegulæ, patches on pectus, coxæ, and streaks on legs white; patagia with slight brown streaks; red marks on shoulders; abdomen with the greater part of 1st segment, the 2nd, and part of 3rd white, sublateral white spots on 4th and 5th segments, some ochreous in anal tuft below. Fore wing yellowish hyaline, the veins and margins black. Hind wing black, the underside white, the tuft of hair yellowish white.

Hab. Venezuela, Caura Valley (*Klages*), 1 ♂. *Exp.* 28 millim.

806. **Diptilon halterata.**

♀. Head, thorax, and abdomen dark brown; palpi yellow, except 3rd joint; frons white; antennæ whitish at tips; gulæ yellow; back of head with pair of yellow spots; prothorax with pair of yellowish spots, the metathorax whitish; pectus with some yellow; fore coxæ white, the legs streaked with yellow; abdomen with the three basal segments yellow with brown dorsal spots, the other segments with narrow yellow bands, the ventral surface yellow. Fore wing hyaline, the veins and margins narrowly brown; a slight orange streak below costa and some yellow at base of inner margin; an oblique brown discoidal bar; the underside with the veins and discoidal bar orange-yellow. Hind wing small and rounded, the costal half reduced to a small contorted lobe; hyaline with the veins and termen dark, inner margin yellow; the underside with the costal lobe yellow.

Paraguay, Puerto Bertoni (*Schrottky*). This may be the female of some other species, but the typical male occurs in the same locality.

*808 *a*. **Diptilon crassa.** (Plate XII. fig. 12.)

Diptilum crassum, Zerny, Iris, xxvi. p. 123 (1912).

♂. Head, thorax, and abdomen black-brown; antennæ with some white on shaft near tips; palpi except at tips, patches on shoulders,

and pectus in front orange; coxæ orange; abdomen with subdorsal orange patches on three terminal segments, the ventral surface orange, whitish at base. Fore wing hyaline, the veins and margins black-brown; an orange streak on base of subcostal nervure; the inner area black-brown, narrowing to tornus; a black-brown terminal patch from costa to vein 5. Hind wing hyaline, the veins and margins black-brown; the inner area black-brown slightly irrorated with grey; the costal area and cell except a streak in lower extremity black-brown, the costal edge white.

Hab. Colombia, Bogotá (*Steinheil*), type † ♂ in Mus. Vienna. *Exp.* 32 millim.

809. **Diptilon philocles**, insert (syn.):—

Æthriopsis barbata, Schrottky, Iris, xxiv. p. 151 (1910).

Paraguay, Puerto Bertoni (*Schrottky*), 1 ♀.

809 *a*. **Diptilon sylpha**. (Plate XII. fig. 13.)

Diptilon sylpha, Dogn. Ann. Soc. Ent. Belg. xlvi. p. 228 (1902).

♂. Head, thorax, and abdomen black shot with brilliant blue; palpi with some white at extremity of 1st and 2nd joints; frons with yellowish marks at sides and above; tegulæ narrowly crimson in front and at sides; pectus with crimson patches at sides in front and white lateral patches at sides and on coxæ; abdomen with the ventral surface white. Fore wing yellowish hyaline, the veins and margins narrowly black, the inner margin more widely so. Hind wing hyaline, the veins and margins narrowly black; the costal area white with some black below it.

Hab. Ecuador (*Labonnefon*), 1 ♂. *Exp.* 28 millim.

*809 *b*. **Diptilon hoffmannsi**.

Diptilon hoffmannsi, Roths. Nov. Zool. xviii. p. 42 (1911), & xix. p. 375, pl. iii. f. 31.

♂. Head and thorax black-brown; palpi with some white hair above and below; frons white at sides; coxæ with some white; legs fulvous yellow, brown towards base; abdomen black-brown, the terminal segments glossed with grey, the ventral surface whitish. Fore wing hyaline, the veins and margins narrowly black-brown; slight fulvous yellow streaks on subcostal nervure and above inner margin, the postmedial part of costa whitish. Hind wing hyaline, the veins and margins black-brown.

Hab. Peru, Huanuco, Pozuzo (*Hoffmanns*), type † ♂ in Coll. Rothschild. *Exp.* 28 millim.

810 *a*. **Diptilon aterea.**

Diptilon aterea, Schaus, J. N.Y. Ent. Soc. ix. p. 42 (1901).

The antennæ dilated at middle.

♂. Head, thorax, and abdomen black; palpi at sides, frons and gulæ orange; tegulæ and patagia slightly edged with orange; abdomen with lateral and ventral orange fasciæ on basal half. Fore

Fig. 33.—*Diptilon aterea*, ♂. ½.

wing hyaline, the veins and margins rather narrowly black; some orange at base; the terminal band expanding moderately on apical area. Hind wing orange-yellow with terminal rather narrow black band dentate inwards to middle on vein 1.

Hab. Brazil, type † ♂ in U.S. Nat. Mus.; Paraguay, Sapucay (*Foster*), 1 ♂. *Exp.* 26 millim.

*810 *b*. **Diptilon gladia.** (Plate XII. fig. 14.)

Diptilon gladia, D. Jones, Trans. Ent. Soc. 1914, ined. pl. i, f. 8.

♂. Head, thorax, and abdomen black; frons with some whitish below; gulæ and streaks below shoulders and wings yellow; fore coxæ greyish, the mid and hind coxæ with yellow spots, the mid and hind tibiæ and the tarsi streaked with yellow; abdomen with the anal tuft grey at tips, the ventral surface with the four basal segments yellow and a yellow spot on anal segment. Fore wing hyaline, the veins and margins black; a yellow spot at base; a black discoidal point at origin of vein 5; the terminal band expanding slightly towards apex. Hind wing with the costal half yellow with a black fascia below it, the inner area hyaline with the margins and vein 1 black.

Hab. S. Brazil, São Paulo, Aracatuba (*D. Jones*), type † ♂ in Coll. D. Jones. *Exp.* 24 millim.

*810 *c*. **Diptilon aurantiipes.**

Diptilon aurantiipes, Roths. Nov. Zool. xviii. p. 42 (1911), & xix. p. 375, pl. iii. f. 12.

Fore wing of male on underside with fringe of hair along vein 1; hind wing with the costal area clothed with rough upturned hair; abdomen with the 2nd segment slightly constricted.

♂. Head and thorax fulvous yellow; antennæ blackish at tips; the vertex of head brownish, the tegulæ with brown bars, the patagia with brown streaks; palpi whitish in front, side of frons whitish; abdomen fulvous yellow with dorsal blackish lines on

Fig. 34.—*Diptilon aurantiipes*, ♂. ½.

three basal segments. Fore wing hyaline, the veins and margins brown; a yellow streak below postmedial part of costa; diffused brown streaks on vein 1 and inner margin; the terminal band expanding somewhat on apical area. Hind wing hyaline, the veins and margins pale brownish. Underside of fore wing with the fringe of hair on vein 1 yellowish; hind wing with the costal area fulvous.

Hab. Brazil, Amazons, R. Maderia, Calama (*Hoffmanns*), type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

*812 *a*. **Syntrichura melæna**. (Plate XII. fig. 15.)

Syntrichura melæna, Dogn. Ann. Soc. Ent. Belg. li. p. 224 (1907).

♀. Head, thorax, and abdomen black; palpi whitish towards tips in front; abdomen with the base of ventral surface whitish. Fore wing hyaline, the veins and margins rather narrowly black; a black discoidal bar. Hind wing hyaline, the veins and margins narrowly black, the costa towards apex and termen to submedian fold rather more broadly black.

Hab. Peru, Cajon, type † in Coll. Dognin. *Exp.* 32 millim.

Page 367. Genus **HEREA**, insert (syn.) :—

	Type.
Desmidocnemis, Möschl. Stett. Ent. Zeit. xxxiii. p. 346 (1872)...	*prittvitzi*.

814. **Herea xanthogaster**, insert :—

No. 803. *Desmidocnemis prittvitzi*, which has priority.

Genus **METACROCEA**.

	Type.
Metacrocea, Dyar, Pr. U.S. Nat. Mus. xxix. p. 173 (1905)	*postflava*.

Proboscis fully developed; palpi upturned to vertex of head; antennæ of female bipectinate with short branches; tibiæ with the spurs short; abdomen with the 2nd segment constricted. Fore wing with the costa highly arched towards apex which is rounded, vein 3 from before angle of cell, 4, 5 from angle; 6 from below upper angle; 7, 8, 9, 10 stalked; 11 from cell. Hind wing with the cell rather long; vein 2 from long before angle; 3, 4 stalked; 5 from well above angle; 6, 7 from upper angle.

In key differs from *Æthria* in the hind wing having the cell moderately long, veins 3, 4 stalked.

*815 *a*. **Metacrocea postflava.**

Metacrocea postflava, Schaus, Pr. U.S. Nat. Mus. xxix. p. 173 (1905).

♀. Head and thorax black-brown; abdomen with the 1st three segments black-brown tinged with blue, the last five orange, the ventral surface brown. Fore wing brown suffused with grey leaving the veins, and streaks in cell and submedian fold dark brown;

Fig. 35.—*Metacrocea postflava*, ♀. ½.

traces of diffused curved ante- and postmedial lines; dark streaks in the interspaces of terminal area. Hind wing black-brown, the lower part of cell and interspaces just below and beyond it hyaline.

Exp. Brazil, Rio Janeiro, type † ♀ in U.S. Nat. Mus. *Exp.* 32 millim.

816. **Eumenogaster notabilis**, insert (syn.) :—

Eumenogaster caurensis, Klages, Pr. U.S. Nat. Mus. xxix. p. 546 (1906).

*817 *a*. **Eumenogaster affinis.** (Plate XII. fig. 16)

Eumenogaster affinis, Roths. Nov. Zool. xviii. p. 42 (1911).

♂. Palpi and frons white, the vertex of head fuscous and white; antennæ blackish, the shaft crimson above except towards tip; thorax pale rufous, the patagia edged with black, the metathorax with pair of blackish points; pectus and legs fulvous yellow, the coxæ and extremities of fore femora white, with a black streak on extremities of femora and base of tibiæ, the extremities of tarsi black, the mid and hind tibiæ black at base and extremities; abdomen with the two basal segments fulvous, the other segments black with a greyish tinge, the ventral surface with the five basal segments fulvous. Fore wing hyaline, the veins and margins narrowly blackish, the costal area suffused with fulvous red to median nervure and vein 4, the inner margin with fulvous fascia. Hind wing hyaline, the veins and margins narrowly brown.

Hab. Venezuela, Caura R., Corosito (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

*818 *a*. **Eumenogaster nigricauda.** (Plate XII. fig. 17.)

Eumenogaster nigricauda, Dogn. Hét. Nouv. Am. Sud, ii. p. 8 (1911).

♂. Head and thorax fulvous orange with some blackish on vertex of head, tegulæ, edges of patagia and dorsum of thorax;

lower part of frons whitish; antennæ with the shaft crimson, black before extremities which are whitish, the branches black; fore coxæ white; abdomen with the basal segments fulvous orange, the terminal half black, the ventral surface white and yellow to beyond middle. Fore wing hyaline, the costal half and veins tinged with fulvous yellow, the costal edge and inner margin black; orange streaks below costa and above basal half of inner margin; the veins towards termen and cilia brown. Hind wing hyaline, the veins and margins yellow tinged with brown; cilia brownish; the underside with the costal area orange to beyond middle.

Hab. Fr. Guiana, Nouveau Chantier (*Le Moult*), type † ♂ in Coll. Dognin. *Exp.* 30 millim.

*819 *a*. **Eumenogaster baura.** (Plate XII. fig. 18.)

Eumenogaster baura, D. Jones, Trans. Ent. Soc. 1914, ined. pl. i. f. 11.

♂. Head black, the palpi in front, frons and gulæ white, the back of head with some yellow; tegulæ and patagia yellow, the latter with black streaks; dorsum of thorax black with yellow patch on metathorax; pectus black with yellow patches at sides; legs black, the coxæ with white patches, the hind femora streaked with yellow, the mid and hind tibiæ with crimson and the tarsi yellow with some black at extremities; abdomen black-brown with dorsal yellow patch on basal segment and subdorsal patches on 2nd and 3rd segments, the ventral surface with the 1st segment yellow edged with black, the 2nd white edged with black and the 3rd and 4th crimson. Fore wing hyaline, the veins and margins black; a crimson streak below costa and another above basal half of inner margin, the discocellulars crimson with some fulvous and blackish suffusion in and beyond the cell. Hind wind hyaline, the veins and margins black, the costal edge whitish to beyond middle with a black streak below it, some yellow on inner margin; the underside with orange streak turning to crimson outwardly on costa.

Hab. S. Brazil, São Paulo, Baura (*D. Jones*), type † ♂ in Coll. D. Jones. *Exp* 32 millim.

821 *a*. **Urolasia albipuncta.** (Plate XII. fig. 19.)

Urolasia albipuncta, Druce, A. M. N. H. (7) xv. p. 462 (1905).

♂. Head, thorax, and abdomen black shot with blue; palpi in front, frons, gulæ, a ring round neck, spots on shoulders, pro- and metathorax, patches on pectus, and coxæ white; abdomen with dorsal series of white spots, the ventral surface with the 1st two segments white and sublateral spots on 4th, 5th, and 6th segments. Fore wing hyaline, the veins and margins black; a white point at base; a black discoidal bar; the terminal band expanding on apical area. Hind wing hyaline, the veins and margins black; the terminal band expanding on apical area and below vein 2, the inner area black; the underside with some white near base.

Hab. Venezuela, Caura Valley (*Klages*), 2 ♂. *Exp.* 32 millim.

823 *a*. **Metastatia azurea.** (Plate XII. fig. 20.)

Metastatia azurea, Lathy, Entom. xxxii. p. 118 (1899).
Agyrta rubroanalis, Roths. Nov. Zool. xix. p. 164 (1912).

♀. Black shot with brilliant blue; palpi in front and behind, sides of frons, and gulæ white; pectus and coxæ white; abdomen with slight white dorsal line, the ventral surface white, the last two segments crimson. Fore wing with large triangular hyaline patch in and below the cell and above vein 2; a slightly curved postmedial band from below costa to vein 3 near termen. Hind wing hyaline, the veins, upper part of cell, a fascia on terminal part of costa, and a terminal band with rather irregular inner edge black shot with blue.

Hab. Ecuador, Angamarca, 1 ♀ type, Cachabé (*Rosenberg*), type † ♀ *rubroanalis* in Coll. Rothschild. *Exp.* 40 millim.

Page 372. Under **CHRYSOSTOLA** insert (syn.):—

Pseudargyroeides Klages, Pr. U.S. Nat. Mus. xxix. p. 546 (1906)	Type. *caurensis*.

*825 *a*. **Chrysostola discoplaga.** (Plate XII. fig. 21.)

Chrysostola discoplaga, Schaus, Pr. U.S. Nat. Mus. xxix. p. 189 (1905).

♀. Head black, tegulæ black with whitish patches; thorax orange, the patagia slightly edged with black, the prothorax black with a whitish patch; tarsi streaked with black; abdomen orange, the last two segments black. Fore wing hyaline, the veins, costa, and inner margin orange on basal half, the veins and margins black on outer half; a triangular black discoidal spot conjoined to the costal area and slightly edged by yellow on inner side; the terminal line expanding moderately at apex. Hind wing hyaline, the base and veins orange, the inner margin and a terminal line expanding moderately at apex black.

Hab. Venezuela, Caura Valley (*Klages*), type † ♀ in U.S. Nat. Mus. *Exp.* 26 millim.

826 *a*. **Chrysostola mellita.** (Plate XII. fig. 22.)

Chrysostola mellita, Schaus, A. M. N. H. (8) vii. p. 180 (1911).

♂. Head and thorax black; pectus and legs yellow, the tibiæ black at base, the mid tarsi black except towards base, the hind tarsi wholly black; abdomen yellow with lateral black patches at base and the terminal segments black. Fore wing hyaline, the veins and costal and inner margins of basal half yellow with slight black streaks below base of cell and on vein 1; the terminal half with the veins and margins black, the black on termen expanding widely on apical area and at tornus. Hind wing hyaline, the veins, costa,

and inner margin yellow; a large apical black patch followed by a fine terminal line to vein 2; a slight black mark at tornus.

Hab. Costa Rica, Sixola R. (*Schaus*), 1 ♂. *Exp.* 32 millim.

*828 *a*. Chrysostola caurensis. (Plate XII. fig. 23.)

Pseudargyroeides caurensis, Klages, Pr. U.S. Nat. Mus. xxix. p. 547 (1906).

♀. Head, thorax, and abdomen black-brown; palpi with the tips orange in front; frons with lateral yellow spots; antennæ with yellow point in front of basal joint; vertex of head and neck with some yellow hair, and metallic green streaks behind antennæ; tegulæ irrorated with yellow; mesothorax with subdorsal yellow streaks; metathorax with patch of metallic blue scales and some brown and yellow hair; patagia edged with yellow and with some brown and yellow hair at tips; pectus with metallic blue streaks and yellow patch; abdomen with dorsal point on 1st segment and spot on 2nd yellow, the 3rd segment in front and below yellowish, the 3rd, 4th, and 5th segments edged with yellow. Fore wing hyaline yellow, the veins and margins narrowly black-brown, the veins with some yellowish scales; an oblique black discoidal bar; the terminal band expanding slightly from vein 4 to apex. Hind wing hyaline yellow, the veins and margins narrowly black-brown; the lobe on inner margin clothed with black hair; the terminal band expanding slightly towards apex. Underside with the veins yellowish.

Hab. Venezuela, Suapure (*Klages*). *Exp.* 30 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

*828 *b*. Chrysostola variegata. (Plate XII. fig. 24.)

Argyroeides variegata, Kaye, Entom. xliv. p. 145 (1911).

♂. Head and thorax black-brown with silvery blue points on vertex of head, tegulæ, and pro- and metathorax; antennæ white in front towards base and above towards extremity; patagia with crimson streaks; coxæ white and yellow; fore legs black with the tarsi yellow; mid legs yellow with the tibiæ black; hind legs yellow with crimson streaks on femora and tibiæ, the latter black towards base; abdomen brown with some silvery blue on dorsum of subterminal segments, subdorsal blue-white spots on 2nd, 3rd, 6th, and 7th segments, yellow lateral spots on 1st and 5th segments and white spot on 2nd segment, the ventral surface white at base and with sublateral white spots on 2nd and 3rd segments and yellow bands on 5th and 6th segments. Fore wing hyaline, the veins and margins dark brown; a slight rufous streak below costa. Hind wing hyaline, the veins and margins narrowly black. Underside of both wings with the veins crimson; fore wing with the costa and inner margin yellow to beyond middle.

Hab. Brazil, Paraña, Fernandes Pinheiro (*Kaye*), type † ♂ in Coll. Kaye. *Exp.* 26 millim.

831. **Chrysostola tetrazona**, insert :—

Eumenogaster pseudopolybia, Schrottky, Iris, xxii. p. 135 (1909)

for the subspecies.

Paraguay, Puerto Bertoni (*Schrottky*), 1 ♂.

832. **Chrysostola sanguiceps**, insert (syn.) :—

Sphecopsyche julumito, Dogn. Ann. Soc. Ent. Belg. xlii. p. 344 (1898).

835 *a*. **Chrysostola atridorsata.** (Plate XII. fig. 25.)

Chrysostola atridorsata, Hmpsn. A. M. N. H. (8) iv. p. 347 (1909).

♂. Head, thorax, and abdomen orange-yellow; antennæ black with some white on shaft towards tips; vertex of head with black spot; patagia and dorsum of thorax with black stripes; pectus with lateral black spots; abdomen with dorsal black stripe, the two terminal segments with black bands, subdorsal short black stripes at base and middle and sublateral black spots at base. Fore wing hyaline, the veins and margins black; the base orange, an orange streak on inner margin to beyond middle; a black discoidal spot conjoined to the costal fascia; the terminal band expanding into a patch at apex. Hind wing hyaline, the veins and margins black; the inner area and an apical patch black.

Hab. Br. Guiana (*Rodway*), 1 ♂ type; Rio Demerara, 1 ♂. *Exp.* 26 millim.

*840 *a*. **Chrysostola nivaca.** (Plate XII. fig. 26.)

Heliura nivaca, D. Jones, Trans. Ent. Soc. 1914, ined. pl. i. f. 8.

♂. Head brown, the back of head, thorax, and abdomen crimson; palpi orange, black at tips; tibiæ banded with black, the tarsi orange at base, black at tips; abdomen with brown segmental lines and silvery blue dorsal streak on terminal segments, sublateral white spots on basal segment. Fore wing hyaline, the veins and margins rufous; a yellow streak below antemedial part of costa and yellow patch on postmedial costal area; a broad erect medial rufous band; the terminal band expanding widely on apical area. Hind wing hyaline, the veins and margins rufous; some yellow at base of inner margin; the terminal band expanding widely towards apex and below vein 2.

Abdomen slightly constricted near base; hind wing with vein 4 from 3 just before termen.

Hab. Brazil, Matto Grosso, Nivac, type † ♂ in Coll. D. Jones. *Exp.* 26 millim.

*841 *a*. **Ecdemus rubrothorax.**

Teucer rubrothorax, Roths. Nov. Zool. xviii. p. 43 (1911), & xix. p. 375, pl. iii. f. 3.

♂. Head and tegulæ black, the palpi in front, frons, a few scales on vertex of head, and tegulæ at base and above white;

thorax crimson; pectus and legs black and white, the pectus with crimson patches in front; abdomen black with dorsal white points on two basal segments, lateral white streaks, the ventral surface white with black segmental lines. Fore wing hyaline; the veins and a streak in end of cell black, the margins broadly black; the whole apical area to end of cell and vein 5 black. Hind wing black with a white fascia in the cell; the underside with white spot in end of cell.

Hab. Brazil, Amazons, R. Madeira, Humayta (*Hoffmanns*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

*841 *b*. **Ecdemus obscurata.** (Plate XII. fig. 27.)

Ecdemus obscuratum, Schaus, A. M. N. H. (8) vii. p. 180 (1911).

♂. Head, thorax, and abdomen dark brown; palpi white in front, tinged with orange at base; frons with lateral white points; antennæ with the basal joint white in front and white tips; neck with orange ring behind the eyes; throat orange; coxæ white, the legs streaked with whitish below; ventral surface of abdomen white. Fore wing dark brown; a hyaline streak in lower part of cell, a streak below the cell and short streaks above bases of veins 4 to 2. Hind wing hyaline, the veins and margins black, the terminal band with somewhat dentate inner edge from vein 2 to tornus, the underside with the costal area black-brown to discal fold.

Hab. Costa Rica, Guapiles (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 26 millim.

*841 *c*. **Ecdemus fuliginosa.** (Plate XII. fig. 28.)

Heliura fuliginosa, Roths. Nov. Zool. xix. p. 168 (1912).

♀. Head, thorax, and abdomen black-brown. Fore wing dark greyish brown, the veins and discal and submedian folds blackish; two semihyaline streaks in cell, a streak below the cell and patches between bases of veins 5 to 2. Hind wing hyaline, the veins and margins black; the terminal band expanding irregularly below veins 2 and 1.

Hab. Peru, Huanuco, Pozuzo (*Hoffmanns*), type † ♀ in Coll. Rothschild. *Exp.* 32 millim.

*844 *a*. **Cercopimorpha postflavida.** (Plate XII. fig. 29.)

Heliura postflavida, Roths. Nov. Zool. xix. p. 167 (1912).

♀. Head, thorax, and abdomen dark-brown tinged with grey, the last with the three terminal segments yellow; fore coxæ and hind femora at extremities white. Fore wing dark brown suffused with grey; an oblique dark antemedial shade from costa and an oblique fascia from submedian fold before middle to tornus; a quadrate dark patch from costa at end of cell and an oblique fascia across

apical area; some slight dark marks on termen from apex to vein 3. Hind wing dark brown, the lower part of cell and a fascia below it and beyond its lower extremity hyaline.

Hab. Venezuela, Caura R., Maripa (*Klages*), type † ♀ in Coll. Rothschild. *Exp.* 32–36 millim. This is possibly the female of *C. dolens*.

844 *b*. Cercopimorpha dolens. (Plate XII. fig. 30.)

Heliura dolens, Schaus, Pr. U.S. Nat. Mus. xxix. p. 191 (1905).

♂. Head and thorax black-brown; palpi whitish at base and extremity of 2nd joint; fore coxæ yellowish white in front; abdomen blackish, tinged with blue at extremity, the 1st three segments yellowish white ventrally. Fore wing black suffused with leaden grey leaving some deep black at base of inner margin, above middle of vein 1 extending to inner margin at extremity, above end of cell, and as a narrow postmedial band between veins 6 and 2. Hind wing greyish black, the lower part of cell and area below it and beyond lower angle hyaline, leaving a terminal band expanding and irregularly dentate towards tornus.

Hab. Venezuela, Caura Valley (*Klages*), type † ♂ in U.S. Nat. Mus., Corosito, La Vuelta (*Klages*), 2 ♂. *Exp.* 32 millim.

847 *a*. Teucer hypophæa.

Teucer hypophæa, Hmpsn. A. M. N. H. (7) xv. p. 429 (1905).
Teucer germana, Roths. Nov. Zool. xviii. p. 43 (1911), & xix. p. 375, pl. iii. fig. 4.

♂. Head, thorax, and abdomen black; back of head with two yellow spots; patagia and prothorax with slight greyish streaks, metathorax with greyish patch; pectus and fore coxæ with whitish patches; abdomen with the anal tuft white at extremity, the ventral surface whitish at base. Fore wing black suffused in parts with grey, especially on terminal area; discocellulars grey; a quadrate hyaline patch in end of cell, an elongate patch below the cell, a slight streak above base of vein 2, and four patches beyond the cell between veins 7 and 3. Hind wing black with hyaline patches in and below the cell; the underside with white patches in and below the cell, the fold on inner area white, the rough hair on terminal area greyish.

Hab. Venezuela, Caura Valley (*Klages*), 1 ♂ type. *Exp.* 26 millim, Type † ♂ *germana* in Coll. Rothschild.

*850 *a*. Teucer rosada.

Ardonca rosada, Dogn. Ann. Soc. Ent. Belg. xxxviii. p. 238 (1895); id. Lep. Loja, p. 104, pl. xi. f. 4.
Ptychoglene puelengei, Dogn. Ann. Soc. Ent. Belg. xlii. p. 345 (1898).

♂. Head, thorax, and abdomen dark reddish brown; palpi in front and fore coxæ with grey mixed; pectus with blue patches; abdomen suffused with blue above towards base. Fore wing dark

red-brown with dark discoidal spot. Hind wing with the basal half crimson; the terminal area blue-black, very wide at costa narrowing somewhat to inner margin. Underside of fore wing with crimson patch in and beyond the cell; hind wing crimson with the costal and terminal areas dark brown.

Ab. 1. *puelengei*. Hind wing with the base and inner area dark, a dark streak on median nervure; the terminal band narrower; underside of fore wing with the crimson patch more defined and not extending to base.

Hab. Ecuador, Loja, type † ♂ and type † ♂ *puelengei* in Coll. Dognin. *Exp.* 30 millim.

854. **Pterygopterus cæruleus**, insert (syn.):—

Pterygopterus flavicornis, Kaye, Entom. xliv. p. 142 (1911).

Br. Guiana, Potaro R. (*Roberts*), type † ♀ in Coll. Kaye.

856 *a*. **Episcepsis dominicensis.**

Episcepsis dominicensis, Roths. Nov. Zool. xviii. p. 44 (1911), & xix. p. 375, pl. iii. f. 6.

♀. Head and thorax dull brown; the back of head with two yellow spots; fore coxæ with yellow patches; abdomen brown suffused with metallic blue except at base and on ventral surface. Fore wing dull reddish brown with a white patch at apex. Hind wing pale brown, the cell and area just below it semihyaline.

Hab. Dominica (*Elliott*), 1 ♀. *Exp.* 36 millim. Type † ♀ in Coll. Rothschild.

857 *a*. **Episcepsis capysca.** (Plate XII. fig. 31.)

Episcepsis capysca, Schaus, A. M. N. H. (8) vi. p. 190 (1910).

♀. Head orange with black spots on upper part of frons and vertex of head; palpi black-brown, white in front; antennæ black-brown; thorax black-brown, the tegulæ orange at base and greyish at tips, the patagia and sides of thorax with greyish streaks; legs with greyish streaks; abdomen black with a faint bluish gloss on dorsum. Fore wing black-brown, the veins, discal and submedian folds with greyish ochreous streaks; a large white apical patch. Hind wing black with semihyaline streaks in, below, and just beyond the cell.

Hab. Costa Rica, Sixola R. (*Schaus*), 1 ♀. *Exp.* 38 millim.

857 *b*. **Episcepsis capyscoides.** (Plate XII. fig. 32.)

Episcepsis capyscoides, Dogn. Hét. Nouv. Am. Sud, ii. p. 10 (1911).

♀. Head, thorax, and abdomen fuscous brown, the back of head with two small yellow spots with a whitish line between them, the patagia with faint greyish streaks; frons with lateral white spots; coxæ and extremities of femora with whitish streaks; abdomen with

ventral series of ill-defined white patches. Fore wing fuscous brown, the veins slightly streaked with greyish; the apical area white extending on termen to vein 4. Hind wing fuscous brown with slight white irroration in lower extremity of cell and below and just beyond the cell; a white spot at base of inner area.

Hab. Fr. Guiana, St. Jean Maroni (*Le Moult*), type † ♀ in Coll. Dognin. *Exp.* 40 millim.

*857 *c*. Episcepsis hampsoni.

Episcepsis hampsoni, Roths. Nov. Zool. xviii. p. 43 (1911), & xix. p. 375, pl. iii. f. 5.

♂. Head and thorax dark brown; frons white at sides; back of head with two orange spots; shoulders with orange spots; palpi white at base, the coxæ and femora with some white; abdomen dark brown, the terminal half and the sides except two basal segments metallic blue, the ventral surface white with dark segmental lines on terminal segments. Fore wing dark brown with small pure white apical patch. Hind wing dark brown with diffused whitish streak below the cell, the tuft in fold of inner area pure white; the underside with broad white fascia below the cell extending into end of cell and to near termen.

Hab. Surinam, Maroewym Valley, Aroewarwa Creek (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 34 millim.

*857 *d*. Episcepsis littoralis.

Episcepsis littoralis, Roths. Nov. Zool. xviii. p. 44 (1911), & xix. p. 375, pl. iii. f. 10.

♂. Head and thorax dull reddish brown with a slight blue gloss between and behind the antennæ and on metathorax; palpi at base, lower part of frons, coxæ and femora with some metallic blue; abdomen dull reddish brown with lateral and sublateral series of metallic blue patches. Fore wing uniform brown with a cupreous gloss. Hind wing dark brown, the lower end of cell and interspaces below and beyond it semihyaline white. Underside with some diffused blue on basal area of fore wing and on basal costal area and inner margin of hind wing.

Hab. Venezuela, San Esteban (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 36 millim.

* 857 *e*. Episcepsis scintillans.

Episcepsis scintillans, Roths. Nov. Zool. xviii. p. 44 (1911), & xix. p. 375, pl. iii. f. 13.

♂. Head and thorax dull red-brown suffused with metallic blue; femora and tibiæ with blue streaks; abdomen dull red-brown with lateral and sublateral metallic blue patches. Fore wing reddish brown glossed with brilliant purple, some metallic blue suffusion at base. Hind wing dark brown, the lower extremity of cell and

interspaces below and beyond it semihyaline whitish. Underside of both wings with some blue suffusion below basal half of costa.

Hab. Brazil, Amazons, R. Madeira, Allianca (*Hoffmanns*), type † ♂ in Coll. Rothschild. *Exp.* 36 millim.

*858 *a*. **Episcepsis clagesi.**

Episcepsis klagesi, Roths. Nov. Zool. xviii. p. 44 (1911), & xix. p. 375, pl. iii. f. 7.

♂. Head and base of tegulæ orange-yellow, the vertex of head with black spot, the antennæ black with the basal joint white in front; palpi and frons grey-brown, the latter with white spots at sides; thorax grey-brown; coxæ white; femora and tibiæ with whitish streaks; abdomen metallic blue with dorsal brown patch on basal segments, the ventral surface white, dark brown at extremity. Fore wing fuscous brown, the veins and submedian fold streaked with grey; a pure white apical patch. Hind wing dark brown, the cell and area just below and beyond it semihyaline whitish, the tuft in fold of inner area ochreous; the underside white with the margins broadly brown.

Hab. Venezuela, San Esteban (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 32 millim.

859 *a*. **Episcepsis gnomoides.** (Plate XIII. fig. 1.)

Episcepsis gnomoides, Schaus, A. M. N. H. (8) vi. p. 190 (1910).

♂. Head and thorax greyish brown; palpi white in front; the upper part of frons with pair of white points, the back of head with pair of crimson spots; fore coxæ white; abdomen black with lateral metallic blue patches and the terminal half with blue bands, the ventral surface with the three basal segments white. Fore wing grey-brown, the veins blackish. Hind wing blackish with some semihyaline in, below, and just beyond the cell.

Hab. Costa Rica, Juan Vinas (*Schaus*), 1 ♂. *Exp.* 34 millim.

*859 *b*. **Episcepsis phlebitis.** (Plate XIII. fig. 2.)

Episcepsis phlebitis, Dogn. Mém. Soc. Ent. Belg. xxii. p. 2 (1913).

♂. Head and thorax fuscous brown, the back of head with two orange spots; basal joint of antennæ white in front; palpi grey in front; patagia with grey streaks; pectus with some whitish at sides; fore coxæ with white patches; the femora streaked with white; abdomen fuscous brown, the terminal half dorsally suffused with metallic blue, the ventral surface white except at extremity. Fore wing fuscous brown, the costal edge grey towards base, the veins, discal fold in cell, and submedian fold streaked with grey; cilia white at tips towards apex. Hind wing black, the lower part of cell and area just below it and beyond lower angle semihyaline

whitish; the tuft of hair in fold of inner area creamy white; the underside with the white area below and beyond the cell more extensive.

Hab. Br. Honduras, Belize, type † ♂ in Coll. Dognin. *Exp.* 30 millim.

861. **Episcepis inornata**, insert (syn.) :—

Episcepsis dodaba, Dyar, Pr. U.S. Nat. Mus. xxxviii. p. 230 (1910).

♂. Tegulæ with more or less prominent crimson spots on their outer edges; abdomen with ventral white patch on basal segments.

♀. Sometimes with a few crimson scales on outer edge of tegulæ; abdomen without white on ventral surface.

862 *a*. **Episcepsis frances.** (Plate XIII. fig. 3.)

Episcepsis frances, Dyar, Pr. U.S. Nat. Mus. xxxviii. p. 230 (June 7th, 1910).

Episcepsis redunda, Schaus, A. M. N. H. (8) vi. p. 190 (Aug. 1910).

♂. Head and thorax fuscous tinged with grey; the back of head and shoulders with paired crimson spots; fore coxæ crimson in front; abdomen metallic blue with the hair on dorsum of basal segments greyish fuscous, the ventral surface with white patches on 1st three segments. Fore wing uniform fuscous tinged with grey. Hind wing fuscous black, the lower part of cell and interspaces just below and beyond it with semihyaline white streaks. Underside of fore wing with white streak below base of subcostal nervure; hind wing with the lower part of cell and area just below and beyond it and the basal inner area white.

Ab. 1. Hind wing with the white on underside reduced.

Hab. Mexico, Sta. Rosa, 2 ♂ co-type *redunda*; Costa Rica; Venezuela, 1 ♀, Caura Valley (*Klages*), 1 ♂; Fr. Guiana; Br. Guiana (*Rodway*, *Kaye*), 3 ♂; Peru. *Exp.* 32–36 millim.

863 *a*. **Episcepsis vinasia.** (Plate XIII. fig. 4.)

Episcepsis vinasia, Schaus, A. M. N. H. (8) vi. p. 189 (1910).

♂. Head orange with black point on vertex; palpi and lower part of frons grey-black; antennæ black; thorax grey-black, the tegulæ orange at base and on outer edge, the patagia edged with grey; fore coxæ orange in front; abdomen metallic blue with large patch of fuscous hair at base, the ventral surface white with the extremity black. Fore wing grey-black; the veins, discal and submedian folds streaked with pale grey. Hind wing black slightly shot with blue; semihyaline white streaks in, below, and beyond lower part of cell; the tuft of hair in the fold on inner area ochreous; the underside with the semihyaline area white and confluent with a white fascia on inner area.

Hab. Costa Rica, Juan Vinas (*Schaus*), 1 ♂. *Exp.* 36 millim.

*866 *a*. Episcepsis sordida.

Episcepsis sordidus, Roths. Nov. Zool. xviii. p. 44 (1911), & xix. p. 375, pl. iii. f. 8.

♂. Head, thorax, and abdomen dark reddish brown, the vertex of head with two yellow spots with a V-shaped blackish mark between them defined in front by whitish; palpi with the 1st joint edged by white above and below; fore coxæ white, the mid and hind femora with whitish streaks; ventral surface of abdomen with white patches except towards extremity. Fore wing dark reddish brown, the veins and submedian fold with pale streaks; a white discoidal striga; a large whitish apical patch suffused with brown. Hind wing brown, the lower end of cell and interspaces below and beyond it semihyaline whitish, the inner area with large whitish patch.

Hab. Venezuela, San Esteban (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 34 millim.

867 *a*. Episcepsis sixola. (Plate XIII. fig. 5.)

Episcepsis sixola, Schaus, A. M. N. H. (8) vi. p. 190 (1910).

♂. Head, thorax, and abdomen black-brown, the tegulæ with small crimson spots on outer edge; the coxæ with some white at sides, the mid and hind femora with some white at extremities; abdomen slightly shot with blue, subventral white patches except towards extremity. Fore wing uniform black-brown. Hind wing black-brown with semihyaline white streak below the cell and just beyond its lower extremity and large patch on inner area extending to tornus.

Hab. Costa Rica, Sixola R. (*Schaus*), 1 ♂. *Exp.* 38 millim.

*867 *b*. Episcepsis occendeni.

Episcepsis ockendeni, Roths. Nov. Zool. xviii. p. 44 (1911), & xix. p. 375, pl. iii. f. 9.

♂. Head and thorax dull reddish brown, the vertex of head with two spots defined by blackish, the tegulæ with blackish dorsal streak; abdomen dull reddish brown, the terminal half of dorsum greyish brown. Fore wing uniform dull reddish brown. Hind wing grey-brown.

Hab. Peru, Carabaya, S. Domingo (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 40 millim.

[869 *a*. Androcharta clagesi. (Plate XIII. fig. 6.)

Androcharta klagesi, Roths. Nov. Zool. xix. p. 151 (1912).

♂. Head and thorax red-brown, the frons, back of head, and tegulæ with a few metallic blue scales, the metathorax with metallic blue patch; shoulders and fore coxæ with white patches; abdomen

dark red-brown with dorsal crimson spots on four basal segments, subdorsal metallic blue spots on all except basal segment, and lateral crimson spots at base. Fore wing red-brown; a white spot at base of costa followed by a metallic blue spot below the costa; a crimson streak below the costa from near base to beyond middle; two short subbasal crimson streaks below the cell; a small hyaline spot in upper part of cell towards extremity and two metallic blue discoidal points; small hyaline postmedial spots above and below vein 6, a larger spot below vein 5 and large spot below vein 4. Hind wing white, the base and costal area to near apex red-brown; the underside red-brown, with some metallic blue in base of cell and a wedge-shaped white patch below the cell.

♀. Abdomen with crimson dorsal spots on seven segments and sublateral crimson spots on 2nd to 4th segments; fore wing with elliptical hyaline spot below middle of cell; hind wing red-brown with hyaline patch below and beyond end of cell.

Hab. Venezuela, Ciudad Bolivar (*Klages*), type † ♂, ♀ in Coll. Rothschild, Esteban Valley, Las Quiguas, 1 ♂, 1 ♀. *Exp.* ♂ 38, ♀ 42 millim.

*871 *a*. **Androcharta hoffmannsi.** (Plate XIII. fig. 7.)

Androcharta hoffmannsi, Roths. Nov. Zool. xix. p. 151 (1912).

♂. Head, thorax, and abdomen black-brown; frons with some metallic blue; back of head with pair of metallic blue spots; tegulæ and metathorax with blue spots, the patagia with blue streaks; fore coxæ with white patches; abdomen with dorsal crimson streak on two basal segments, subdorsal white spots at base, blue spots on 2nd to 6th segments, dorsal blue spot on penultimate segment, lateral crimson streaks on 2nd and 3rd segments and sublateral series of blue spots. Fore wing black-brown; subbasal metallic blue spots below the costa and cell; a blue streak in middle of cell followed by a semielliptical hyaline spot in upper part of cell and two blue discoidal spots, the upper spot rather wedge-shaped; an oblique elliptical hyaline spot below middle of cell and a large rounded postmedial patch from discal fold to vein 3 intersected by dark streaks on veins 5 and 4. Hind wing with the base and costal area to beyond middle red-brown; a white patch below and beyond end of cell and the rest of inner area and the terminal area grey; the underside red-brown, with some metallic blue in base of cell and white patch below and beyond end of cell.

♀. Hind wing with the marginal areas black-brown with some metallic blue on inner area.

Hab. Brazil, Amazons, R. Madeira, Humayta (*Hoffmanns*), type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 44, ♀ 46 millim.

872. **Androcharta stretchi,** insert:—

Androcharta giganteum, Druce, A. M. N. H. (7) iii. p. 230 (1899)

for the subspecies.

Amazons, R. Napo (*Whiteley*), type † in Coll. Joicey.

875. **Eriphioides ustulata**, insert (syn.) :—

Eriphioides rosenbergi, Roths. Nov. Zool. xix. p. 151 (1912).

Colombia, Rio Dagua (*Rosenberg*), type † ♂ in Coll. Rothschild.

Ab. *columbina*, Dyar, J. N.Y. Ent. Soc. vii. p, 175 (1899).

Fore coxæ white ; fore wing with discal orange patch.

*875 *a*. **Eriphioides phæoptera.** (Plate XIII. fig. 8.)

Eriphioides phæoptera, Dogn. Mém. Soc. Ent. Belg. xix. p. 121 (1912).

♂. Head and thorax black-brown, the antennæ with a bluish gloss ; abdomen black-brown with dorsal and lateral series of golden spots and white sublateral spots on first three segments. Wings black-brown, the fore wing with silvery blue spot below base of costa. Underside of fore wing with pale brown streak below middle of costa and the inner area pale brown ; hind wing with silvery blue suffusion on basal half of costal area and in cell.

Hab. Colombia, Tolima, type † ♂ in Coll. Dognin. *Exp.* 46 millim.

877. **Ceramidia butleri**, insert (syn.) :—

Ceramidia caurensis, Klages, Pr. U.S. Nat. Mus. xxix. p. 548 (1906).

The form without the crimson spots on neck.

Ceramidia musicola, Cockerell, Can. Ent. xlii. p. 61 (1910).

The form with white spot on frons.

Ab. 1. Head, thorax, and terminal half of fore wing with a slight bluish tinge ; abdomen suffused with golden green.

Taken in High St., Marlborough, and probably imported with bananas from Costa Rica.

877 *a*. **Ceramidia cyanopasta.** (Plate XIII. fig. 9.)

Ceramidia cyanopasta, Dogn. Hét. Nouv. Am. Sud, ii. p. 10 (1911).

♂. Head, thorax, and abdomen black-brown suffused with metallic green, the back of head with two crimson spots ; fore coxæ white in front, the ventral surface of abdomen with the 1st three segments white and white spots on lower part of the lateral tubercles. Fore wing black-brown with a slight purple tinge ; suffused with metallic green to end of cell except on costal area. Hind wing black-brown with a slight purplish tinge, the costal half whitish. Underside of fore wing with the inner area below the cell, the basal half of cell and a streak below middle of costa whitish, the end of cell suffused with metallic blue, the terminal area with purple ; hind wing black-brown, the costal area to end of cell and the cell except lower extremity suffused with metallic blue.

♀. Fore wing uniformly suffused with metallic green ; hind wing with green suffusion on inner half from middle to termen, the

costal area pale brown; underside of fore wing with the basal half of cell and inner area cupreous brown, the blue suffusion extending to well beyond the cell.

Hab. Colombia, R. Dagua, 1 ♀; Venezuela, Merida, 2 ♂. *Exp.* 42 milllim. Type † ♂, ♀ in Coll. Dognin.

*877 *b.* **Ceramidia underwoodi.** (Plate XIII. fig. 10.)

Ceramidia underwoodi, Roths. Nov. Zool. xix. p. 152 (1912).

♀. Head and thorax very dark red-brown with some metallic blue on vertex of head, tegulæ, base of patagia, and prothorax; shoulders with crimson spots in front; abdomen dark brown with a golden-brown tinge, some metallic blue at base of dorsum, the ventral surface with the basal half white. Fore wing black-brown suffused with metallic blue-green; a metallic blue spot at base of costa. Hind wing very dark red-brown with a faint greenish gloss. Underside suffused with metallic blue-green except inner area of fore wing.

Hab. Costa Rica (*Underwood*), type † ♀ in Coll. Rothschild. *Exp.* 38 millim.

*877 *c.* **Ceramidia scintillocollaris.** (Plate XIII. fig. 11.)

Ceramidia scintillocollaris, Roths, Nov. Zool. xix. p. 152 (1912).

♂. Head and thorax black-brown, the vertex of head and tegulæ with metallic blue patches, the patagia with blue streaks, the frons, shoulders, and coxæ with white spots; abdomen black-brown with a golden bronze tinge, subdorsal metallic blue patches at base, white patches on the lateral tubercles, and the basal half of ventral surface white. Fore wing black-brown suffused with sap-green, the terminal area red-brown; metallic blue spots at base of costa. Hind wing with the costal half silvery white to near apex, the inner half and terminal area very dark red-brown with a faint greenish gloss. Underside of fore wing with the basal half except costal area and the terminal half below vein 2 whitish, the rest of wing dark brown suffused with metallic greenish blue; hind wing dark brown with the basal half suffused with metallic greenish blue to just below the cell.

Hab. Nicaragua, San Ramon, Rio Wanks (*Palmer*), type † ♂ in Coll. Rothschild. *Exp.* 42 millim.

*877 *d.* **Ceramidia clagesi.** (Plate XIII. fig. 12.)

Ceramidia klagesi, Roths. Nov. Zool. xix. p. 151 (1912).

♂. Head and thorax and basal segment of abdomen black-brown suffused with sap-green, shoulders with crimson spot in front, the fore coxæ with white patches; the rest of abdomen dark brown with a golden bronze tinge, the ventral surface with the basal half white. Fore wing narrow; black-brown suffused with sap-green. Hind

wing with the costal half white to just below the cell, the inner half dark brown. Underside of fore wing with the basal half except costal area and the terminal half below vein 2 whitish, the rest of wing dark brown suffused with greenish blue; hind wing brown with the basal half to just below the cell suffused with greenish blue.

Hab. Surinam, Maroewym Valley, Aroewarwa Creek (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 34 millim.

*878 *a*. **Ceramidia bricenoi.** (Plate XIII. fig. 13.)

Ceramidia bricenoi, Roths. Nov. Zool. xix. p. 152 (1912).

♂. Head and thorax black-brown; frons and tegulæ with metallic blue spots, shaft of antennæ above metallic blue; fore coxæ with white spots; legs tinged with metallic blue; abdomen golden cupreous brown, the base of dorsum black-brown with some metallic blue, the 2nd segment with white lateral spots, and sublateral spots on three basal segments. Fore wing black-brown suffused with metallic green especially on basal half. Hind wing black-brown, with the costal area whitish brown to beyond middle. Underside of fore wing with the inner area whitish brown, a streak of whitish scales below middle of costa; hind wing suffused with metallic green especially on basal half to below the cell.

Hab. Venezuela, Sierra de Merida, Montan (*Briceno*), type † ♂ in Coll. Rothschild. *Exp.* 48 millim.

*879 *a*. **Ceramidia painei.** (Plate XIII. fig. 14.)

Ceramidia painei, Roths. Nov. Zool. xix. p. 152 (1912).

♂. Head, thorax, and base of abdomen black-brown suffused with metallic green; tegulæ pure white except at edges; fore coxæ with white patches; the rest of abdomen golden bronze with lateral white patches on 2nd and 3rd segments and sublateral series of white spots. Fore wing black-brown suffused with metallic blue-green especially on basal half. Hind wing black-brown with the costal area paler to beyond middle. Underside of fore wing with the inner area whitish brown, a streak of ochreous scales below middle of costa; hind wing suffused with metallic green especially on basal half to below the cell.

Hab. Colombia, Cauca, Corinto (*Paine & Brinckley*), type † ♂ in Coll. Rothschild. *Exp.* 50 millim.

*879 *b*. **Ceramidia simplex.** (Plate XIII. fig. 15.)

Ceramidia simplex, Roths. Nov. Zool. xix. p. 152 (1912).

♂. Head and thorax dark red-brown with some silvery patches; shoulders with crimson patches in front; fore coxæ with white patches; abdomen red-brown dorsally suffused with silvery green, lateral white spots on 2nd segment and sublateral fasciæ on basal half. Fore wing red-brown with a silvery blue spot at base of

costa. Underside of fore wing with the area covered by the lobe of the hind wing whitish, a streak of whitish scales below middle of costa, the rest of wing suffused with metallic blue-green; hind wing with the basal half to just below the cell suffused with metallic blue-green, the inner area with whitish fasciæ.

♀. Underside of wings red-brown without blue green, or white.

Hab. Colombia, Rio Dagua (*Rosenberg*); Ecuador, Cachabé (*Rosenberg*), type † ♂ in Coll. Rothschild. *Exp.* 36 millim.

*879 *c*. **Ceramidia viridisaturata.** (Plate XIII. fig. 16.)

Ceramidia viridisaturata, Roths. Nov. Zool. xix. p. 153 (1912).

♂. Head, thorax, and abdomen black-brown, the frons, tegulæ, and shoulders with metallic green spots; palpi with white points on basal joint; fore coxæ and femora above white; the rest of abdomen dark brown with a golden cupreous gloss, the lateral tubercles with white spots, sublateral white spots on three basal segments. Fore wing black-brown; some metallic green at base of costa and the medial area suffused with metallic green. Hind wing black-brown, the costal half white. Underside of fore wing with the area covered by the costal area of hind wing white, the streak of androconia below middle of costa ochreous white, the rest of wing suffused with metallic green except toward termen; hind wing suffused with metallic green except the inner area.

Hab. ? Brazil, Rio Janeiro, type † ♂ in Coll. Rothschild. *Exp.* 46 millim.

*879 *d*. **Ceramidia scotoptera**, n. n. (Plate XIII. fig. 17.)

Amcyles klagesi, Roths. Nov. Zool. xix. p. 154 (1912), nec p. 151.

♀. Head and thorax dark red-brown largely suffused with metallic green; neck crimson at sides; fore coxæ with white patches; abdomen black-brown suffused with metallic green, some white behind the lateral tubercles and sublateral white patches on two basal segments. Fore wing dark red-brown with metallic green patch at base of costa. Hind wing dark red-brown.

Hab. Venezuela, San Esteban (*Klages*), type † ♀ in Coll. Rothschild. *Exp.* 32 millim.

879 *e*. **Ceramidia dolosa**, Wlk., trans. from *Amycles*, no. 885.

*882 *a*. **Ceramidia chalco-viridis.** (Plate XIII. fig. 18.)

Ceramidia chalco-viridis, Hmpsn. A. M. N. H. (7) viii. p. 172 (1901).

♂. Black; palpi with white spots at base; neck with crimson spots; head, thorax, and abdomen suffused with bronze-green, the last with sublateral white fasciæ except on terminal segments. Hind wing black-brown, the costal area pale.

Hab. Brazil, Minas Geraes (*Birchell*), type † ♂ in Mus. Oxon. *Exp.* 42 millim.

883 *a*. **Ceramidia albipunctata.** (Plate XIII. fig. 19.)

Eriphioides albipunctata, Lathy, Entom. xxxii. p. 119 (1899).

♂. Black; frons, tegulæ, shoulders, mesothorax, fore and hind coxæ with white spots; abdomen with dorsal metallic green stripe, the lateral tubercles at base white, and lateral white stripes except on terminal three segments. Fore wing with metallic blue-green suffusion below base of costa and below the cell to beyond middle; a slight hyaline streak in lower end of cell and points above bases of veins 2 and 3. Hind wing with the costal area pale; the basal half of inner area white on upper and undersides. Underside of both wings suffused with blue.

Hab. Ecuador, Balsampamba, Angamarca, 1 ♂ type. *Exp.* 40 millim.

*883 *b*. **Ceramidia phaiodes.** (Plate XIII. fig. 20.)

Ceramidia phaiodes, Dogn. Mém. Soc. Ent. Belg. xix. p. 122 (1912).

♂. Head and thorax black-brown, the frons, tegulæ, patagia, meso- and metathorax with white spots; coxæ with white patches; abdomen black-brown with a silvery tinge, a white dorsal spot at base, lateral spots on two basal segments, and a sublateral series of white spots. Fore wing black-brown, the basal half suffused with golden scales; a small hyaline spot in lower part of cell towards extremity and a spot below it above vein 2. Hind wing black-brown; the basal half of inner area white; an elliptical hyaline spot below end of cell. Underside of fore wing with a white streak below middle of costa; hind wing with the basal half of costal area and the cell suffused with golden scales.

Hab. Colombia, Tolima, type † ♂ in Coll. Dognin. *Exp.* 46 millim.

883 *c*. **Ceramidia viridis.** (Plate XIII. fig. 21.)

Eriphioides viridis, Lathy, Entom. xxxii. p. 118 (1899).

♂. Black; frons and vertex of head with some metallic blue; palpi at base and spots on fore coxæ white; abdomen bronze-green, the 1st segment black with some metallic blue; a lateral white fascia except on terminal segment. Fore wing with the basal half suffused with metallic golden green. Hind wing with the costal half whitish.

Hab. Ecuador, 1 ♂ type. *Exp.* 38 millim.

*883 *d*. **Ceramidia metallica.** (Plate XXII. fig. 1.)

Antichloris metallica, Roths. Nov. Zool. xix. p. 155 (1912).

♂. Head and thorax black-brown with some silvery blue on vertex of head and tegulæ; palpi with white points at base, the fore coxæ with white patches; abdomen black-brown dorsally suffused with golden cupreous, the basal segment and sides with metallic green,

a lateral white spot on 2nd segment and sublateral fasciæ on four basal segments followed by spots on two following segments. Fore wing black-brown, the basal half suffused with brilliant greenish gold. Hind wing black-brown, the costal half whitish. Underside of fore wing suffused with golden green except the terminal area, the inner area whitish; hind wing suffused with golden green to median nervure and towards termen.

Hab. Ecuador, Paramba (*Rosenberg*), type † ♂ in Coll. Rothschild. *Exp.* 38 millim.

*883 *e*. Ceramidia cuprea. (Plate XIII. fig. 22.)

Ceramidia cuprea, Schaus, J. N.Y. Ent. Soc. ix. p. 42 (1901).

♂. Head brown, the frons steel-blue, the antennæ blue-black with white tips; thorax brown with some blue scales on tegulæ and cupreous on prothorax; fore coxæ and 1st joint of tarsi whitish; abdomen cupreous with the 1st segment golden green, the ventral surface golden brown with the 1st segment white. Fore wing reddish brown, rather paler towards termen, the veins tinged with greenish on basal half. Hind wing brown, the costal area pale; two hyaline streaks on basal half of inner area. Underside of fore wing with the area covered by the costal lobe of hind wing whitish; hind wing with the basal half of costal area metallic blue-green.

Hab. Mexico, Coatepec, type † ♂ in U.S. Nat. Mus. *Exp.* 36 millim.

883 *f*. Ceramidia chloroplegia. (Plate XIII. fig. 23.)

Ceramidia chloroplegia, Druce, A. M. N. H. (7) xv. p. 462 (1905).
Antichloris nigrolineata, Roths. Nov. Zool. xix. p. 154. (1912).

♂. Head, thorax, and abdomen black; frons, vertex of head, tegulæ, and shoulders with metallic green spots; neck with slight crimson spots; fore coxæ with white spots; abdomen with dorsal and lateral golden green stripes and sublateral white stripes except on terminal segment. Wings black-brown shot with green; hind wing with the costal half pale; underside of fore wing with the disk and hind wing with the costal half to end of cell suffused with golden green.

Hab. Venezuela, Caura Valley (*Klages*), 10 ♂, La Union (*Klages*), type † ♂ *nigrolineata* in Coll. Rothschild, Guyapa, Suapure. *Exp.* 40 millim.

*883 *g*. Ceramidia affinis. (Plate XIII. fig. 24.)

Ceramidia affinis, Roths. Nov. Zool. xix. p. 153 (1912).

♂. Head, thorax, and base of abdomen black-brown with some metallic green; neck crimson at sides; palpi with white points on basal joint; fore coxæ with white points at base; the rest of abdomen black-brown with a cupreous gloss and sublateral white fasciæ except at extremity. Fore wing black-brown slightly suffused with metallic green on inner and terminal areas. Hind wing black-brown

with the costal area white. Underside of fore wing with the area covered by the costal area of hind wing white, the streak of androconia below middle of costa ochreous white, the rest of wing suffused with metallic green except towards termen; hind wing with the basal half suffused with metallic green to below the cell.

Hab. Brazil, Amazons, Teffé (*M. de Mathan*), type † ♂ in Coll. Rothschild. *Exp.* 34 millim.

*883 *h*. **Ceramidia intensa.** (Plate XIII. fig. 25.)

Antichloris intensa, Roths. Nov. Zool. xix. p. 154 (1912).

♂. Head and thorax black-brown, the frons, vertex of head, tegulæ, and shoulders with metallic green spots; neck crimson at sides; palpi with white spot on basal joint; fore coxæ with white spots at base; abdomen black-brown with dorsal and lateral pale golden yellow fasciæ, sublateral white fasciæ to middle followed by spots on two following segments. Fore wing very dark red-brown with slight greenish suffusion on the costal area and veins except towards termen. Hind wing very dark red-brown with the costal half whitish. Underside of fore wing with the area covered by the costal area of hind wing and the streak of androconia below middle of costa whitish, the rest of wing suffused with metallic green except towards termen; hind wing with the basal half suffused with metallic green to discal fold.

Hab. Surinam, Maroewym Valley, Aroewarwar Creek (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 40–44 millim.

883 *i*. **Ceramidia atrinervis.** (Plate XIII. fig. 26.)

Antichloris atrinervis, Roths. Nov. Zool. xix. p. 155 (1912).

Head and thorax black-brown, the frons, vertex of head, tegulæ, and metathorax with metallic green spots, the neck crimson at sides; palpi with white spots on basal joint and streak on 2nd; legs tinged with green, the fore coxæ with white spots at base; abdomen black-brown with a cupreous gloss, the base, sides, and ventral surface suffused with green, white spots behind the lateral tubercles and sublateral white fasciæ to middle followed by spots on the two next segments. Fore wing black-brown suffused with metallic green. Hind wing very dark red-brown, the costal half whitish. Underside of fore wing with the area covered by the costal area of hind wing whitish, the streak of androconia below middle of costa ochreous white, the rest of wing suffused with metallic green except towards termen; hind wing with the basal half suffused with metallic green to just below the cell.

Hab. Brazil, Amazons, Teffé (*M. de Mathan*), type † ♂ in Coll. Rothschild, Matto Grosso, Nivac, 1 ♂, 1 ♀. *Exp.* 42 millim.

*883 *j*. **Ceramidia steinbachi.** (Plate XIII. fig. 27.)

Antichloris atrinervis, steinbachi, Roths. Nov. Zool. xix. p. 155 (1912).

♂. Head, thorax, and basal segment of abdomen black-brown, the

frons, vertex of head, tegulæ, shoulders, prothorax, and base of abdomen with metallic green patches; neck crimson at sides and with white spots behind; palpi with white spots on basal joint; fore coxæ white at base; the rest of abdomen dark-brown with a golden cupreous gloss and sublateral white fasciæ to middle followed by spots on two following segments. Fore wing black-brown suffused with metallic green. Hind wing black-brown, the costal half paler brown. Underside of fore wing black-brown suffused with metallic green, the area covered by the costal area of hind wing brown with some whitish above, the streak of androconia below middle of costa ochreous; hind wing dark brown, the basal half suffused with metallic green to just below the cell.

Hab. Bolivia, Java, Sta. Cruz de la Sierra (*Steinbach*), type † ♂ in Coll. Rothschild, Buenavista. *Exp.* 38 millim.

884 *a*. **Amycles affinis.** (Plate XIII. fig. 28.)

Amycles affinis, Roths. Nov. Zool. xix. p. 153 (1912).

♂. Head, thorax, and abdomen dark red-brown, antennæ with the shaft metallic green above except towards extremity; fore coxæ and the basal joint of tarsi white; abdomen with white marks behind the lateral tubercles, the ventral surface with the two basal segments white. Fore wing dark red-brown, the apical area from end of cell and down to vein 2 semihyaline yellowish white shading to brownish. Hind wing dark red-brown, the costal half whitish, the inner area with semihyaline white streaks above and below vein 1 to beyond middle. Underside of fore wing with the area covered by the costal area of hind wing white, the streak of androconia below middle of costa ochreous white; hind wing red-brown except the streaks on inner area, the basal half of costal area tinged with metallic green.

Hab. Venezuela, Caura R., La Union (*Klages*), 6 ♂, Maripa, La Vuelta, Suapure, Merida, Mechisera (*Briceno*). *Exp.* 30 millim. Type † in Coll. Rothschild.

*884 *b*. **Amycles tenebrosa.** (Plate XIII. fig. 29.)

Amycles tenebrosa, Roths. Nov. Zool. xix. p. 154 (1912).

♂. Head and thorax black-brown; antennæ with the shaft tinged with metallic green above except towards tips; fore coxæ and 1st joint of tarsi white; abdomen black-brown with a slight metallic green tinge, the ventral surface with the basal segment white. Fore wing black-brown shading to red-brown, the apical area semihyaline down to vein 2. Hind wing black-brown, the costal half white, the inner area with hyaline streaks above and below vein 1 to middle. Underside of fore wing with the area covered by the costal area of hind wing white, the streak of androconia below middle of costa ochreous white; hind wing black-brown except the hyaline streaks.

Hab. Venezuela, Caracas, type † ♂ in Coll. Rothschild. *Exp.* 32 millim.

*884 *c*. **Amycles brincleyi.** (Plate XIII. fig. 30.)

Amycles brinkleyi, Roths. Nov. Zool. xix. p. 154 (1912).

♀. Head, thorax, and abdomen very dark red-brown; antennæ with the shaft tinged with metallic green above, the extremity whitish; legs tinged with green, the tarsi whitish at base; ventral surface of abdomen with the basal segment white. Fore wing very dark red-brown, the apical area paler red-brown from end of cell down to vein 2. Hind wing very dark red-brown, the inner area with hyaline streaks above and below vein 1 to middle.

Hab. Colombia, Cauca, Coreato (*Paine & Brinckley*), type † ♀ in Coll. Rothschild. *Exp.* 32 millim.

887. **Antichloris eriphia**, insert (syn.):—

Antichloris quartzi, Klages, Pr. U.S. Nat. Mus. xxix. p. 548 (1906).

Venezuela.

*887 *a*. **Antichloris puriscal.** (Plate XIV. fig. 1.)

Antichloris puriscal, Schaus, A. M. N. H. (8) vii. p. 181 (1911).

♂. Head and thorax black, the head suffused with metallic blue, the upper edge of patagia and dorsum of thorax with metallic blue streaks; palpi white at sides towards base; crimson patches below shoulders; the coxæ with whitish patches, the tibiæ with some metallic blue suffusion; abdomen black suffused with metallic blue, sublateral white fasciæ ending in spots on two subterminal segments. Fore wing black with small white apical patch; diffused metallic blue streaks below basal half of costa and above and below vein 1. Hind wing black, the costal area whitish. Underside of fore wing with the inner area whitish, the cell suffused with metallic blue; hind wing suffused with metallic blue except inner and terminal areas.

Hab. Costa Rica, Puriscal (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 40 millim.

888 *a*. **Antichloris purpurea.** (Plate XIV. fig. 2.)

Antichloris purpurea, Lathy, Entom. xxxii. p. 119 (1899).

♂. Black; frons, vertex of head, patagia, and thorax with patches of metallic green; tegulæ and coxæ with white patches; abdomen metallic green with white dorsal band on 1st two segments, the ventral and lateral surfaces white to middle followed by two lateral points; wings shot with brilliant blue; hind wing with the costal area pale.

Hab. Ecuador, 1 ♂ type. *Exp.* 46 millim.

Genus **CERAMIDIODES**, nov.

Type, *C. mathani*.

Proboscis fully developed; palpi upturned, the 2nd joint reaching to middle of frons, the 3rd short; antennæ of male bipectinate with moderate branches to three-fourths length, the apical part serrate; tibiæ smoothly scaled, the spurs short; abdomen slightly constricted at 2nd segment. Fore wing with the costa highly arched towards apex which is rounded, the termen obliquely curved; vein 3 from before angle of cell; 4, 5 from angle; 6 from upper angle; 7, 8, 9, 10 stalked; 11 from cell; male with a streak of androconia below middle of costa and fringe of long hair on inner margin below. Hind wing with vein 2 from near angle of cell; 3, 4 from angle; 5 from above angle; 6 from upper angle; 7 from well before angle and strongly curved upwards; the costa highly arched and male with fringe of long hair from middle of costa above.

In key differs from *Empyreuma* in the fore wing having vein 10 stalked with 7, 8, 9; hind wing with vein 3 from the cell.

*889 *a*. **Ceramidiodes mathani.**

Ceramidia mathani, Roths. Nov. Zool. xix. p. 153 (1912).

♂. Head, thorax, and base of abdomen black-brown with some metallic green scales; neck crimson at sides; frons white; palpi white in front; coxæ white; the rest of abdomen black-brown with a golden cupreous gloss, lateral metallic green bars, and the ventral surface white except at extremity. Fore wing black-brown, some metallic green on costal area to beyond middle and along base

Fig. 36.—*Ceramidiodes mathani*, ♂. ½.

of vein 1. Hind wing black-brown with the costal area white. Underside of fore wing with the area covered by the costal area of hind wing white, the streak of androconia ochreous white, the rest of wing suffused with metallic green except towards termen; hind wing with the basal half suffused with metallic green to below the cell.

Hab. Brazil, Amazons, Teffé (*M. de Mathan*), type † ♂ in Coll. Rothschild. *Exp.* 40 millim.

Genus **MARECIDIA**.

Type.

Marecidia, Schaus, J. N.Y. Ent. Soc. ix. p. 43 (1901) ..... *sanguipuncta*.

Proboscis fully developed; palpi upturned, reaching to vertex of head; antennæ bipectinate with short branches; tibiæ with the spurs short, the hind tibiæ of male immensely dilated and containing masses of flocculent hair. Fore wing with vein 2 from middle of cell, curved at base; 3 and 5 from close to angle; 6 from upper angle; 7, 8, 9 10 stalked; 11 from cell. Hind wing with vein 2 from near angle of cell; 3, 4 from angle; 5 curved from above angle; 6, 7 shortly stalked from upper angle.

In key differs from *Ceramidiodes* in the hind wing having veins 6, 7 stalked.

889 *b*. **Marecidia sanguipuncta.**

Marecidia sanguipuncta, Schaus, J. N.Y. Ent. Soc. ix. p. 43 (1901).

Head, thorax, and abdomen black, the frons, tegulæ, patagia, shoulders, and metathorax with golden green patches; legs golden green, the pectus at sides, coxæ, and extremity of hind femora with white patches; abdomen with dorsal golden green patch on 1st segment and paired subdorsal patches on the others, the ventral surface metallic green with the 1st segment white. Fore wing

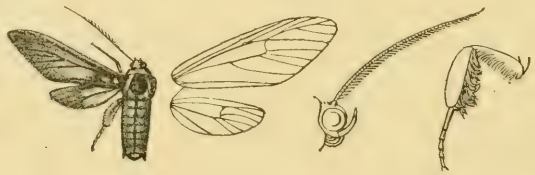

Fig. 37.—*Marecidia sanguipuncta*, ♂. ½.

black; a golden green patch at base of costa; a crimson subbasal patch between the cell and vein 1; the discal area below and beyond end of cell suffused with metallic blue or green. Hind wing black with pink spot in cell and hyaline patch below the cell; the underside with crimson spot in cell with metallic blue suffusion above it.

Hab. Brazil, Sta. Catherina, type † ♂ in U.S. Nat. Mus.; Ecuador, Paramba, 1 ♀. *Exp.* 36 millim.

890 *a*. **Methysia melanota.** (Plate XIV. fig. 3.)

Methysia melanota, Hmpsn. A. M. N. H. (8) iv. p. 347 (1909).

♂. Head, thorax, and abdomen black with a faint bluish gloss; palpi white in front; tegulæ white at base; coxæ and stripes on inner side of femora white; abdomen with white ventral fascia. Fore wing

hyaline, the veins and margins black, the inner area black to submedian fold; a black streak in discal fold from middle of cell to termen, the terminal area with black streaks above veins 6 and 4. Hind wing white, the margins and inner area black.

Hab. Br. Guiana, Demerara (*Rodway*), 2 ♂ type. *Exp.* 26 millim.

*892 *a*. **Pseudaclytia popayana.**

Euceron popayanum, Dogn. Ann. Soc. Ent. Belg. xlvi. p. 229 (1902).

Fore wing with vein 11 stalked with 7, 8, 9, 10.

♀. Head and thorax pale brown; vertex of head orange with a brown spot; antennæ whitish at base; pectus whitish, the base of palpi, front of pectus, and fore coxæ tinged with orange; abdomen orange with dorsal series of large black-brown spots, the ventral surface white. Fore wing pale yellow-brown, the veins rather darker; an indistinct diffused dark line from costa above

Fig. 38.—*Pseudaclytia popayana*, ♀. ½.

end of cell, excurved from middle of discocellulars to vein 2, then oblique; an indistinct diffused subterminal line, excurved from costa to vein 5, then almost obsolete. Hind wing fuscous brown, the cell and area just below it and beyond lower angle rather paler, the veins dark.

Hab. Colombia, Popayan, type † ♀ in Coll. Dognin. *Exp.* 34 millim.

*892 *b*. **Pseudaclytia minor.** (Plate XIV. fig. 5.)

Pseudaclytia minor, Schaus, Pr. U.S. Nat. Mus. xxix. p. 189 (1905).

♂. Head, thorax, and abdomen black-brown, back of head and base of tegulæ tinged with fulvous; fore coxæ white in front. Fore wing black-brown with the veins black. Hind wing black, the lower part of cell, area beyond it and a streak below it hyaline; a slight hyaline streak on inner area.

Hab. Fr. Guiana, St. Jean Maroni, type † ♂ in U.S. Nat. Mus. *Exp.* 22 millim.

892 *c*. **Pseudaclytia major.** (Plate XIV. fig. 6.)

Pseudaclytia major, Druce, A. M. N. H. (7) xviii. p. 79 (1906).
Hyaleucera ockendeni, Roths. Nov. Zool. xix. p. 186 (1912).

Head and thorax black-brown; neck with orange-red ring, shoulders with orange-red streaks; abdomen black-brown dorsally shot with blue. Fore wing fuscous brown with a greyish tinge; the veins and interspaces of terminal area streaked with black. Hind wing semihyaline whitish; the veins black; a fuscous black terminal band diffused inwardly and expanding broadly at apex, below vein 2 and tornus.

Hab. Peru, La Oroya, Rio Inambari (*Ockenden*), 1 ♂, Carabaya, S. Domingo (*Ockenden*), 1 ♂. *Exp.* 36 millim. Type † in Coll. Joicey, type † *ockendeni* in Coll. Rothschild.

*892 *d*. **Pseudaclytia unimacula.** (Plate XIV. fig. 7.)

Pseudaclytia unimacula, Schaus, Pr. U.S. Nat. Mus. xxix. p. 189 (1905).

♀. Head and thorax black-brown; palpi in front and sides of frons whitish; abdomen blackish; pectus, coxæ, and ventral surface of abdomen whitish. Fore wing black-brown with broad oblique yellow band from below costa just beyond middle to above tornus, expanding slightly towards costa. Hind wing blackish.

Hab. Fr. Guiana, Cayenne, type † ♀ in U.S. Nat. Mus. *Exp.* 36 millim.

*892 *e*. **Pseudaclytia pseudodelphyre.** (Plate XIV. fig. 4.)

Agyrta pseudodelphire, Roths. Nov. Zool. xix. p. 164 (1912).

♂. Head and thorax greyish brown; palpi at base and in front, sides of frons and basal joint of antennæ in front white; back of head with two white points; patagia and prothorax with white streaks; coxæ white; abdomen brown dorsally glossed with blue and with sublateral white fasciæ. Fore wing dark brown, the subcostal nervure streaked with white to middle; an oblique white postmedial band from vein 7 to above 2, rounded above and narrowing below. Hind wing dark brown; a white fascia below the cell extending to above base of vein 2; the underside with rather diffused white streak below basal half of costa and a white fascia above inner margin.

Hab. Venezuela, Merida (*Briceno*), type † ♂ in Coll. Rothschild. *Exp.* 38 millim.

899 *a*. **Napata atricincta.** (Plate XIV. fig. 8.)

Napata atricincta, Hmpsn. A. M. N. H. (7) viii. p. 172 (1901).

♂. Orange; palpi mostly black; antennæ black; legs black

streaked with white; abdomen with the terminal segment and lateral stripes widening towards extremity black, the ventral surface white. Fore wing with black streaks on costa and inner margin, the latter not reaching base; a greyish black terminal band widening towards costa, with minutely waved inner edge and with slight white streaks on veins 2–8. Hind wing with the cilia black expanding rather irregularly onto termen towards tornus.

Hab. Brazil, Bahia, 1 ♂ type. *Exp.* 32 millim.

*899 *b*. **Napata flammans.** (Plate XIV. fig. 9.)

Napata flammans, Dogn. Mém. Soc. Ent. Belg. xix. p. 123 (1912).

♂. Head and thorax pale yellow mixed with brown; antennæ blackish; pectus and legs brown mixed with white; abdomen black banded with orange-red at base and yellow towards extremity, the ventral surface banded with white. Fore wing yellow irrorated with brown, the terminal area brown, the outer edge of the yellow area diffused and produced at middle. Hind wing fiery orange-red with terminal series of black spots, confluent on apical area and the spot below vein 2 larger. Underside fiery orange-red; fore wing with the terminal area black-brown expanding towards costa and with slight red streaks on the veins; hind wing with maculate black band except towards tornus divided by red streaks on the veins.

Hab. Colombia, Toche, Quindin, type † ♂ in Coll. Dognin. *Exp.* 30 millim.

*899 *c*. **Napata occendeni.** (Plate XIV. fig. 10.)

Propyria ockendeni, Roths. Nov. Zool. xix. p. 183 (1912).

♂. Head and thorax red-brown; antennæ blackish; palpi white, black at tips; frons blackish tinged with blue; pectus and legs dark brown, the coxæ white, the femora streaked with white; abdomen black-brown with subbasal series of orange-scarlet patches except at extremity, the ventral surface white except at extremity. Fore wing fulvous yellow suffused with red-brown; a diffused rufous discoidal patch, the terminal area deep red-brown. Hind wing scarlet; the inner area black-brown; a narrow black-brown terminal band with irregular inner edge from apex to vein 2 and a patch in submedian interspace. Underside of fore wing scarlet, the costa and terminal area dark brown; hind wing scarlet except the markings on termen.

Hab. Peru, Carabaya, S. Domingo (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

900. **Napata splendida**, insert (syn.):—

Cyanopepla melinda, Dyar, J. N.Y. Ent. Soc. vii. p. 175 (1899),

and del. *Entomis eucyane*, Feld.

*903 *a*. **Napata bipunctata**, n. n. (Plate XIV. fig. 11.)

Phileros ockendeni, Roths. Nov. Zool. xix. p. 185 (1912), nec p. 183.

♀. Head and thorax dark red-brown with some metallic green especially on vertex of head; abdomen dark red-brown with metallic green segmental lines. Fore wing dark red-brown; a metallic green patch at base of costa and small crimson spot below the cell near base; a crimson spot irrorated with red-brown beyond the discocellulars. Hind wing dark red-brown with a crimson patch beyond the cell from just below costa to vein 2, its inner edge angled outwards at lower angle of cell, some crimson scales just below vein 2. Underside of both wings with some metallic green below base of costa; fore wing with silvery blue streak in cell near base and crimson patch beyond and below the cell from vein 6 to below vein 2; hind wing with the crimson patch extending to submedian fold.

Hab. Peru, Carabaya, Suambari (*Ockenden*), type † ♀ in Coll. Rothschild. *Exp.* 34 millim.

*903 *b*. **Napata nigrorufa**. (Plate XIV. fig. 12.)

Propyria nigrorufa, Roths. Nov. Zool. xix. p. 183 (1912).

♂. Head and thorax grey-brown; antennæ blackish; frons slightly glossed with blue; palpi, pectus, legs, and abdomen dark brown. Fore wing red-brown, the postmedial area with the crimson of underside showing through except at costa. Hind wing black-brown with a large crimson patch on terminal half from just below costa to vein 2; the cilia black-brown. Underside of fore wing black-brown with large crimson patch on disk from below costa to submedian fold and to vein 1 towards tornus; hind wing as above.

Hab. Peru, Carabaya, S. Domingo (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 32 millim.

*903 *c*. **Napata hyporhoda**. (Plate XIV. fig. 13.)

Napata hyporhoda, Dogn. Mém. Soc. Ent. Belg. xix. p. 122 (1912).

♂. Head and thorax black-brown; abdomen black-brown with some metallic blue suffusion on dorsum and at base sublaterally. Fore wing black-brown. Hind wing black-brown with a large crimson patch beyond and below end of cell from below costa to submedian fold, narrowing below. Underside of fore wing with large crimson patch in and beyond end of cell from below costa to submedian fold.

Hab Colombia, Toche, Quindin, type † ♂ in Coll. Dognin. *Exp.* 30 millim.

903 *d*. **Napata alterata.** (Plate XIV. fig. 14.)

Josia alterata, Wlk. xxxi. 134 (1864); Kirby, Cat. Het. p. 409.
Flavinia choana, Druce, P. Z.S. 1893, p. 289.

Black; palpi in front, frons, basal joint of antennæ in front, tegulæ at sides, and stripes on legs white; patagia edged with golden yellow; abdomen with lateral golden yellow fasciæ formed of conjoined spots, on basal tubercles divided by a black fascia; a ventral white fascia. Fore wing with large triangular orange-yellow patch extending from near base to near termen, its extremity near base extending below vein 1, its apex into end of cell; an oblique band across apical area not quite reaching costa or termen, its inner side joined in female by a fine subcostal streak. Hind wing with orange streaks on inner margin and in submedian interspace, the latter expanding towards termen; an elliptical spot beyond the cell between veins 3 and 5 extending to near termen; underside with the costal area orange to beyond middle.

Hab. Venezuela, Caura Valley (*Klages*), 7 ♂; Brazil, Ega (*Bates*), 1 ♂ type; Ecuador, Ignitos (*Stewart*), 1 ♀; Peru, Yurimaguas (*Buckley*), type † ♀ *choana* in Coll. Joicey. *Exp.* 44 millim.

*905 *a*. **Napata cordigera.** (Plate XIV. fig. 15.)

Ephialtias cordigera, Warr. Nov. Zool. xiv. p. 198 (1907).

♀. Head, thorax, and abdomen black-brown with a few yellowish scales; palpi in front, sides of frons, basal joint of antennæ in front, and shoulders yellowish; pectus with patches of white; legs striped with white; abdomen with yellow lateral fasciæ, the ventral surface white. Fore wing black-brown with an oblique postmedial orange-yellow band from vein 7 to 2 slightly curved inwards at lower extremity. Hind wing black-brown, some yellow on inner margin; a large rather reniform orange-yellow patch beyond and below end of cell.

Hab. Venezuela, Caura R. (*Klages*), type † ♀ in Coll. Rothschild. *Exp.* 36 millim.

*905 *b*. **Napata subflavescens.** (Plate XIV. fig. 16.)

Napata subflavescens, Kaye, Entom. xliv. p. 143 (1911).

♂. Head, thorax, and abdomen dark brown; palpi white in front; frons white; antennæ with the basal joint white in front; outer edge of tegulæ and shoulders with yellow spots; coxæ white; legs streaked with white; ventral surface of abdomen white except at extremity. Fore wing black-brown with broad golden yellow band from just below costa beyond middle to above inner margin near tornus towards which it narrows, its inner edge sinuous, its outer excurved. Hind wing black-brown; the underside yellow

with diffused dark brown fasciæ in cell, along median nervure and on inner area, and a terminal band from apex to below vein 2, the inner margin white.

Hab. Br. Guiana, Bartica (*Kaye*), type † ♂ in Coll. Kaye. *Exp.* 34 millim.

*905 *c.* **Napata metamela.** (Plate XIV. fig. 17.)

Napata metamela, Dogn. Hét. Nouv. Am. Sud, iii. p. 4 (1911).

♂. Head, thorax, and abdomen black-brown; palpi with the 1st joint yellow, the 2nd and 3rd joints white in front; palpi white at sides; basal joint of antennæ white in front; gulæ yellow; tegulæ slightly edged with white in front; pectus and legs white, the latter streaked with brown above; ventral surface of abdomen white. Fore wing black-brown; an oblique yellow band from just below middle of costa to submedian fold towards termen, rounded below. Hind wing black-brown with slight yellow streak on extremity of median nervure. Underside of fore wing with the costal edge white towards base; hind wing with the costal edge and veins of basal half streaked with white, the inner area suffused with white, the yellow streak on median nervure forking on base of vein 2.

Hab. Fr. Guiana, St. Jean Maroni, type † ♂ in Coll. Dognin. *Exp.* 30 millim.

906. **Napata euchloa**, n. n. (Plate XIV. fig. 18.)

Napata chalybea, Hmpsn. Cat. Lep. Phal. B.M. i. p. 409 (nec Hübn.).

906 *a.* **Napata chalybea.**

Uranophora chalybea, Hübn. Zutr. ex. Schmett. iii. p. 14, ff. 439–440 (1827).

♂. Head, thorax, and abdomen black shot with brilliant blue; basal half of palpi, throat, and inner side of fore coxæ fulvous orange; abdomen with orange line on last two segments, the anal tuft and last four segments ventrally orange. Fore wing black uniformly shot with dark blue, some brilliant blue at base; cilia tipped with white, wholly white towards tornus. Hind wing black shot with brilliant blue; cilia white at tips.

♀. Abdomen with the last two and part of 3rd segment dorsally orange.

Hab. Cuba (*Sommer*), 1 ♂, Alto del Cedro (*Schaus*), 1 ♂, Tanamo (*Schaus*), 5 ♀. *Exp.* ♂ 42, ♀ 46 millim.

*907 *a.* **Napata superba.** (Plate XIV. fig. 19.)

Napata superba, Druce, A. M. N. H. (7) xviii. p. 79 (1906).

♂. Head, thorax, and abdomen black; palpi with the 2nd joint white in front and with some white at base; antennæ with

the basal joint white in front; some brilliant metallic blue on frons, between antennæ, on back of head, tegulæ, patagia, and dorsum of thorax, on pectus and legs; fore coxæ white in front, the tibiæ with white streaks; abdomen with diffused dorsal blue fascia and segmental lines, the ventral surface white. Fore wing black with brilliant metallic blue suffusion below basal half of costa, in cell, in submedian interspace to near termen, below vein 1, and above base of vein 2, and two slight streaks beyond the cell above veins 6 and 5; an apical white patch. Hind wing black with brilliant blue suffusion in cell, in submedian interspace to near termen, and on base of inner margin; the inner area greyish; a small apical white patch; cilia tipped with white from vein 2 to tornus.

Hab. Peru, La Merced (*Watkins*), type † ♂ in Coll. Joicey. *Exp.* 42 millim.

*909 *a*. **Napata pseudolelex.** (Plate XIV. fig. 20.)

Napata pseudolelex, Roths. Nov. Zool. xix. p. 155 (1912).

♀. Head, thorax, and abdomen black-brown, the frons, vertex of head, tegulæ, shoulders, streaks on patagia, and patches on meso- and metathorax brilliant metallic blue; femora and tibiæ streaked with blue; abdomen with dorsal series of slight blue spots and lateral and sublateral series of blue patches. Fore wing black-brown with metallic blue spot at base of costa and short fascia on base of vein 1; cilia white towards apex. Hind wing black-brown with white patch at apex. Underside of fore wing with the retinaculum white followed by a streak below median nervure and a patch in cell towards extremity; hind wing with metallic blue fasciæ in upper part of cell and on inner margin and slight streak on median nervure.

Ab. 1. Underside of both wings with metallic blue spots beyond upper and lower angles of cell.—Cauca.

Hab. Colombia, Bogotá, Cauca; Venezuela; Ecuador, Zamora (*Baron*), type † ♀ in Coll. Rothschild. *Exp.* 38–40 millim.

*911 *a*. **Napata atalanta.** (Plate XIV. fig. 21.)

Napata atalanta, Druce, A. M. N. H. (7) iii. p. 230 (1899).

♂. Black; palpi in front and frons white; vertex of head, tegulæ, and patagia with blue patches; coxæ and stripes on femora and tibiæ white; abdomen with slight dorsal white line on proximal segments and bands on 5th and 6th segments, a lateral series of blue patches, the ventral surface white to beyond middle. Fore wing with diffused semihyaline fascia in and below the cell; cilia white at apex. Hind wing with the inner area white on underside.

Hab. Brazil, Amazons (*Leech*), type † ♂ in Coll. Joicey. *Exp.* 28 millim.

912. **Napata leucotelus**, insert (syn.) :—

Napata venezuelensis, Klages, Pr. U.S. Nat. Mus. xxix. p. 549 (1906).

*912 *a*. **Napata albipuncta.** (Plate XIV. fig. 22.)

Hypocladia albipuncta, Druce, A. M. N. H. (7) xv. p. 461 (1905).

♀. Head and thorax brown; back of head with two crimson spots; palpi at base crimson; neck with crimson ring; abdomen brown with broad crimson lateral stripes. Fore wing brown; a small round white spot below middle of cell; two rather elliptical white postmedial spots between veins 7 and 5 and a small round spot below vein 5. Hind wing brown; a semihyaline white patch in and below the cell extending to just beyond the cell above veins 5 and 2.

Hab. S.E. Peru, St. Domingo, 6000′ (*Ockenden*), type † ♀ in Coll. Joicey. *Exp.* 38 millim.

912 *b*. **Napata albimaculata.** (Plate XIV. fig. 23.)

Napata albimaculata, Hmpsn. A. M. N. H. (7) viii. p. 172 (1901).

♀. Black; palpi white at base; antennæ white towards tips; back of head with two white spots; some crimson behind the eyes; pectus and coxæ with white patches; abdomen with subdorsal white patches on 1st segment and crimson patches on 4th, 5th, 6th, and 7th segments, the ventral surface with white patches on 3rd and 4th segments. Fore wing with white spot beyond the cell. Hind wing with white patch below the cell, in end and just beyond the cell.

Hab. Panama, Cana Mines (*Tylecote*), 1 ♀ type. *Exp.* 42 millim.

917. **Napata quadrimaculata**, insert (syn.) :—

Micraga borealis, Roths. Nov. Zool. xix. p. 160 (1912).

Venezuela, Caura R., Maripa (*Klages*), type † ♂ in Coll. Rothschild.

917 *a*. **Napata sanguicincta.** (Plate XIV. fig. 24.)

Napata sanguicincta, Hmpsn. A. M. N. H. (7) viii. p. 173 (1901).

♀. Dull black; palpi except at tips, neck, and back of head crimson; frons, tegulæ, thorax, and legs with some metallic blue; abdomen brilliant blue. Fore wing with the cilia white at apex. Hind wing shot with blue; a broad terminal crimson band with waved inner edge, expanding below vein 3.

Hab. Peru, Vilcanota (*Garlepp*), 1 ♀ type. *Exp.* 32 millim.

917 *b*. **Napata flaviceps.** (Plate XIV. fig. 25.)

Napata flaviceps, Hmpsn. A. M. N. H. (7) viii. p. 173 (1901).

♀. Black shot with brilliant blue; palpi in front and frons white; vertex of head, gulæ, and spots on shoulders bright orange; patagia edged with white; pectus and the greater part of legs white; abdomen with dorsal and lateral white lines and broad ventral stripe. Fore wing with fine white streak on subcostal nervure from base to middle; a fascia from base below the cell widening to its extremity beyond vein 2; an oblique band beyond the cell between veins 3 and 7 with rounded ends. Hind wing brilliant blue with hyaline fascia in and below the cell to just beyond its extremity; the inner margin white.

Hab. Panama, La Chorrera (*Dolby-Tyler*), 2 ♀ type. *Exp.* 42 millim.

918 *a*. **Napata cortes.** (Plate XIV. fig. 26.)

Napata cortes, Gibbs, Entom. xlvii. p. 54 (1914).

♂. Head and thorax black-brown, the frons, vertex of head' tegulæ at sides, shoulders, patagia, and metathorax with silvery blue spots; fore coxæ with white patches; tibiæ with some crimson towards extremities, the 1st joint of tarsi white; abdomen black-brown, the basal segment with silvery blue spots on the lateral tubercles, the next four segments with metallic green patches, the last three segments fiery red except the dorsum of 6th segment, the ventral surface with the basal half white, the terminal half fiery red. Fore wing black-brown with a greenish tinge on costal area; some silvery blue at base of costa and a minute spot at base of median nervure; a small hyaline spot in middle of cell with larger spot below it; a spot in upper extremity of cell; spots beyond the cell above and below veins 6 and 4, the spots below vein 6 and above 4 small. Hind wing black-brown, the basal area with a hyaline patch above and below vein 1, a spot beyond the discocellulars; the underside with the basal costal area and terminal area suffused with metallic blue.

Hab. Br. Honduras, Punta Gorda (*Norton*), 1 ♂ type. *Exp.* 44 millim.

Page 413. Genus **PATRELIURA**, insert:—

	Type
Trichromia, Hübn. Verz. p. 164 (1827)	*capys*

which has precedence.

920. **Lymire metamelas**, insert (syn.):—

Pseudaclytia flavidorsia, Hmpsn. A. M. N. H. (7) xix. p. 226 (1907).

Venezuela, Caura Valley (*Klages*), 2 ♂ type.

*920 *a*. Lymire fulvicollis. (Plate XIV. fig. 27.)

Lymire fulvicollis, Dogn. Hét. Nouv. Am. Sud, vii. p. 8 (1914).

♂. Head, thorax, and abdomen black-brown, the neck with fulvous ring; fore coxæ white in front. Fore wing uniform black-brown. Hind wing black-brown with the cell and interspaces just below and beyond it hyaline.

Hab. Fr. Guiana, Maroni, type † ♂ in Coll. Dognin. *Exp.* 26 millim.

*925 *a*. Loxozona nitens. (Plate XIV. fig. 28.)

Trichodesma nitens, Roths. Nov. Zool. xix. p. 158 (1912).

♂. Head and thorax black-brown; palpi in front, sides of frons, and basal joint of antennæ in front white; coxæ and femora streaked with white; abdomen black-brown, tinged with blue at sides and with sublateral white fasciæ meeting before the anal tuft. Fore wing black-brown with broad oblique yellow band from below costa before middle to just below vein 2 above tornus. Hind wing black-brown; the underside with whitish streaks on base of subcostal nervure, below the cell and on inner area.

Hab. Venezuela, Caura R., La Union (*Klages*), type † ♂ in Coll. Rothschild, Maripa. *Exp.* 38 millim.

932 *a*. Horama flavata. (Plate XIV. fig. 29.)

Horama flavata, D. Jones, Trans. Ent. Soc. 1908, p. 144.
Horama fulvitarsis, Schrottky, Iris, xxvi. p. 166 (1912).

Head and thorax black-brown; palpi orange with black band at base of 3rd joint; frons with lateral orange patches; vertex of head with orange spot; tegulæ with white spots at middle and sides; patagia at base and meso- and metathorax with paired orange spots; pectus with three orange spots below the wings and three white spots at sides, the coxæ with orange spots, the hind tibiæ with orange band near base and the tarsi orange above; abdomen black-brown tinged with blue and with faint orange segmental bands, the 1st segment with subdorsal white spots and lateral orange spots, a lateral series of orange spots with white patches below them on 2nd and 3rd segments, the ventral valve edged with white behind. Fore wing dark reddish brown with the veins blackish and two slight orange points at base. Hind wing orange, the terminal area suffused with brown, the veins dark.

Hab. Brazil, Castro Paraña, type † in Coll. D. Jones; Paraguay, Puerto Cantera (*Schrottky*), 1 ♀; Argentina, Missiones, Bompland (*Joergensen*). *Exp.* 36 millim.

932 *b*. **Horama castrensis.** (Plate XIV. fig. 30.)

Horama castrensis, D. Jones, Trans. Ent. Soc. 1908, p. 144.

♂. Head, thorax, and abdomen black-brown slightly shot with blue; tegulæ with white points at middle and sides; pectus with lateral white spots; abdomen with small subdorsal white spots on 1st segment, the 2nd and 3rd segments with sublateral white spots and ventral bands; wings black-brown faintly shot with blue along the veins.

Hab. Brazil, Castro Paraña, type † ♂ in Coll. D. Jones. *Exp.* 36 millim.

937. **Empyreuma lichas.**

Zygæna lichas, Fabr. is probably a Zygænid, the locality given is Arabia, and Martyn's Psyche is unpublished beyond the 1st two parts ending with pl. 4.

The species will stand as follows:—

Empyreuma sanguinea.

Sphinx sanguinosa, Martyn's Psyche, pl. 26. ff. 68, 69 (ined.); Kirby, Cat. Het. p. 121 (non descr.).
Empyreuma sanguinea, Roths. Nov. Zool. xix. p. 155 (1912).
Empyreuma sanguinea portoricensis, Roths. Nov. Zool. xix. p. 155 (1912).

Cuba, type † ♂, ♀ in Coll. Rothschild; Porto Rico, type † ♀ *portoricensis* in Coll. Rothschild.

937 *a*. **Empyreuma affinis.** (Plate XIII. fig. 31.)

Empyreuma affinis, Roths. Nov. Zool. xix. p. 155 (1912).
Empyreuma affinis haitensis, Roths. Nov. Zool. xix. p. 156 (1912).
Empyreuma pugione, Oberth. Ét. Lep. Comp. vi. p. 329, pl. 127. ff. 1123–1126 (nec Hübn.).

Head and thorax dark-brown with a faint greyish tinge in parts, the tegulæ at base of middle and sides, the shoulders, and patagia on upper edge near base with white points; abdomen dark-brown dorsally suffused with metallic green, the two basal segments with dorsal white points, lateral white spots on 2nd and 3rd segments and sublateral spots on basal segment. Fore wing scarlet suffused with brown except the base of inner margin and a streak below costa to near apex, the terminal area browner; a white point at base. Hind wing crimson-scarlet with black-brown terminal band rather broader towards costa and its inner edge somewhat irregular. Underside of fore wing scarlet, the costa and terminal area fuscous brown emitting a wedge-shaped fascia from apical area into end of cell; hind wing with the costal half tinged with fuscous brown except towards base.

Ab. 1. *haitensis*. Fore wing slightly less tinged with brown; hind wing purer scarlet.—Haiti.

Hab. Bahamas, Abaco (*Bonhote*), 1 ♀, Nassau (*Sir G. Carter*), 2 ♀; Cuba, 2 ♂, 1 ♀, Holguin, type † ♂, ♀ in Coll. Rothschild; Haiti, type † ♀ *haitensis* in Coll. Rothschild, (*Tweedie*) 1 ♂, 2 ♀. *Exp.* 44–56 millim.

Page 424. Genus **PSEUDOSPHENOPTERA**, insert (syn.) :—

	Type.
Enioche, Druce, A. M. N. H. (6) xviii. p. 34 (1896).....	*pitthea*.

940. **Pseudosphenoptera basalis**, insert (syn.):—

No. 386. *Gymnelia pitthea*.

Dr. Staudinger received from two different collectors specimens of *pitthea* taken in copula with *basalis* and the specimens described under *Enioche* are all males whilst those under *Pseudosphenoptera* are all females. The figure is that of the type *lanceolatus* whilst *basalis* type has vein 5 of the hind wings from well above the angle of cell.

940 *a*. **Pseudosphenoptera cocho**, Schaus, trans. from *Gymnelia*, no. 387.

940 *b*. **Pseudosphenoptera nephelophora**, n. sp. (Plate XIV. fig. 31.)

Gymnelia cocho, ab. 1, Hmpsn. Cat. Lep. Phal. B.M. i. p. 190.

♂. Head and thorax black, the frons white, the vertex of head, tegulæ at base and patagia with metallic blue patches; palpi, pectus behind, and legs with some metallic blue; hind coxæ white; abdomen black with subdorsal metallic blue spots on two basal segments, lateral spots on 3rd segment, diffused dorsal bands and sublateral spots on terminal segments, the ventral surface with the basal segment white. Fore wing hyaline, the veins and margins rather broadly black; the base black with two small metallic blue spots below base of cell; a large black discoidal spot conjoined to the costal area; some black suffusion below end of cell and above vein 5; the terminal band broad with sinuous inner edge. Hind wing with the costal area browner, the lobed inner area blackish.

Hab. S. Brazil, São Paulo, 1 ♂ type. *Exp.* 38 millim.

940 *c*. **Pseudosphenoptera chimæra.** (Plate XIV. fig. 32.)

Gymnelia cocho, ab. 3, Hmpsn. Cat. Lep. Phal. B.M. i. p. 190.
Gymnelia chimæra, Roths. Nov. Zool. xviii. p. 27 (1911), & xx. p. 471, pl. xiv. f. 14.

♂. Head, thorax, and abdomen black-brown; lower part of frons whitish; vertex of head, metathorax and pectus with metallic blue patches; hind coxæ white; abdomen with silvery blue subdorsal spots and slight dorsal streak on two basal segments, the three terminal segments with small dorsal silvery blue spots, lateral series of silvery blue spots, the ventral valve with white band at extremity. Fore wing black-brown; a silvery blue spot below base of cell; a slight hyaline streak below costa near base, a wedge-shaped hyaline antemedial spot in cell and small hyaline spots above and below submedian fold near base; a metallic blue streak in upper extremity of cell and above base of vein 6, and some metallic blue above bases of veins 4, 3, 2. Hind wing black-brown.

Hab. S. Brazil, São Paulo, in Mus. Berlin; Peru, Carabaya, R. Huacamayo, La Union (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 32 millim.

947 *a*. **Ixylasia pyroproctis.** (Plate XV. fig. 1.)

Ixylasia pyroproctis, Druce, A. M. N. H., (7) xv. p. 462 (1905).
Ixylasia kelleri, Klages, P. U.S. Nat. Mus. xxix. p. 550 (1906).

♂. Head, thorax, and abdomen black; tegulæ, patagia, shoulders, pro- and metathorax with slight blue-white spots, coxæ white; abdomen with the three terminal segments orange-red, lateral and sublateral series of white spots on the black segments and a dorsal point on 1st segment, the tufts of hair pale brownish. Wings hyaline, the veins and margins black. Fore wing with the base black; slight black streaks in submedian and discal folds and on terminal area above vein 6; a large black discoidal patch; the terminal band expanding slightly towards apex and below vein 2. Hind wing with slight discoidal lunule, the terminal band expanding on apical area and below vein 2; the underside with some white on base of costa.

Hab. Venezuela, Caura Valley (*Klages*), 1 ♂. *Exp.* 48 millim.

948 *a*. **Ixylasia semivitreata.**

Autochloris almon, Hmpsn. Cat. Lep. Phal. B.M. i. p. 432 (nec Cram.).
Ixylasia semivitreata, Hmpsn. A. M. N. H. (7) xv. p. 429 (1905).

Hab. Brazil, Rio Janeiro (*Fry*), 1 ♂ type, Blumenau, 1 ♀

950. **Cacostatia ossa**, insert (syns.). (Plate XV. fig. 2.)

Cacostatia umbraticola, Klages, P. U.S. Nat. Mus. xxix. p. 551 (1906).
Agyrta nitens, Roths. Nov. Zool. xix. p. 163 (1912).

Colombia, Cundinamarca, Cananche (*M. de Mathan*), type † ♂ in Coll. Rothschild.

950 *a*. **Cacostatia germana.**

Metastatia ossa, Druce, Biol. Centr.-Am., Het. ii. p. 359, pl. 73. f. 1 (nec Druce, 1893).
Agyrta germana, Roths. Nov. Zool. xix. p. 164 (1912).

Head, thorax, and abdomen black suffused with metallic blue; palpi with the basal joint white in front and behind; frons at sides and gulæ white; tegulæ, shoulders, meso- and metathorax with paired white spots; pectus with some white; coxæ and streaks on femora white; abdomen with subdorsal bluish-white streaks, lateral white streaks and the ventral surface white. Fore wing black suffused with blue; a white streak above base of vein 1; an elongate hyaline patch below the cell and base of vein 2, a triangular patch in middle of cell, sometimes very small, a triangular patch above base of vein 2; an oblique postmedial hyaline band from vein 7 to vein 3 towards termen, its lower extremity rounded. Hind wing black suffused with blue, the cell and area below and beyond it hyaline; a bifurcate hyaline mark on base of inner area; the hair on inner margin white.

Hab. Panama, Chiriqui; Venezuela, Caura R. (*Klages*), 5 ♂, La Vuelta, La Union, Corosito, Maripa, Suapure; Surinam, Albina (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 34–36 millim.

*950 *b*. **Cacostatia flaviventralis.** (Plate XV. fig. 3.)

Cacostatia flaviventralis, Dogn. Ann. Soc. Ent. Belg. liii. p. 215 (1909).

♂. Head, thorax, and abdomen black shot with brilliant blue; frons with some white at sides; abdomen with the ventral surface orange except at extremity. Fore wing black; some metallic blue suffusion at base; a wedge-shaped hyaline patch in cell, fascia below the cell and triangular spot above base of vein 2; an oblique hyaline postmedial band from below costa to vein 3 near termen. Hind wing hyaline, the veins and margins black shot with blue, the terminal band wide, expanding at apex and running up to a point near base below vein 1.

Hab. Colombia, type † ♂ in Coll. Dognin. *Exp.* 48 millim.

*950 *c*. **Cacostatia buchvaldi.** (Plate XV. fig. 4.)

Agyrta buchwaldi, Roths. Nov. Zool. xix. p. 162 (1912).

♂. Head, thorax, and abdomen dark brown with some metallic blue on vertex of head, metathorax and base of abdomen; coxæ

white; ventral surface of abdomen yellow except at extremity. Fore wing black-brown slightly glossed with blue; an elongate hyaline patch below the cell and base of vein 2 from near base, a wedge-shaped patch in the cell, and triangular patch above base of vein 2; an oblique postmedial hyaline band from vein 7 to vein 3 before termen, intersected by black streaks on the veins. Hind wing hyaline, the veins and costal area black, the terminal area black suffused with blue, expanding on apical area and to middle of inner area; the hair on inner margin white.

Hab. Brazil, Amazons, R. Madeira, Allianca; Ecuador, Quevedo (*Buchwald*), type † ♂ in Coll. Rothschild; Bolivia, Yungas de Coroico. *Exp.* 36 millim.

*951 *a*. **Cacostatia acutipennis.** (Plate XV. fig. 5.)

Agyrta acutipennis, Roths. Nov. Zool. xix. p. 163 (1912).

♀. Head, thorax, and abdomen black-brown glossed with blue; frons with whitish points at sides; ventral surface of abdomen yellow except at extremity. Fore wing black-brown slightly glossed with blue; a hyaline streak in lower part of middle of cell and an elongate patch below the cell from near base to below middle of vein 2 where it ends in a point; an oblique postmedial hyaline band from vein 7 to vein 3 near termen, its lower extremity rounded. Hind wing hyaline, the veins black, the terminal area black glossed with blue, expanding widely on apical area and towards tornus where it runs up below vein 1 to a point near base.

Hab. Colombia, Bogotá, type † ♀ in Coll. Rothschild. *Exp.* 42 millim.

Page 432. Delete *Autochloris*, Hübn., the genus will stand as **Schasiura**, Butl.

*954 *a*. **Schasiura gymnelioides.** (Plate XV. fig. 6.)

Schasiura gymnelioides, Zerny, Iris, xxvi. p. 123 (1912).

♂. Head and thorax black-brown; palpi except at tips, frons, tegulæ, base and upper edge of patagia, and slight paired marks on pro-, meso-, and metathorax fulvous orange; pectus with lateral metallic blue marks; fore coxæ and streaks on femora and tibiæ fulvous orange; abdomen black-brown with fulvous orange bands on 2nd to 6th segments, some metallic blue on dorsum at base and extremity, the base of ventral surface suffused with metallic blue; the claspers very long and slender. Fore wing hyaline, the veins and margins narrowly black-brown, the inner area more broadly black-brown towards base and with a fulvous orange streak on it above middle of inner margin, a metallic blue point at base of costa; the black-brown on termen expanding slightly at apex. Hind wing hyaline, the veins and margins black-brown, the upper

half of cell and inner area black-brown; the underside with orange streaks below basal part of costa and in base of cell.

Hab. "S. AMERICA," type † ♂ in Mus. Vienna. *Exp.* 40 millim.

956. **Eupyra imperialis**, insert:—

Autochloris affinis, Roths. Nov. Zool. xix. p. 156 (1912).

Similar to type *florella* but fore wing with the green suffusion on postmedial area broader.

PERU, Huancabamba (*Bottger*), type † ♂ in Coll. Rothschild, Agualani (*Ockenden*), ♀.

*958 *a*. **Eupyra distincta.** (Plate XV. fig. 7.)

Eupyra distincta, Roths. Nov. Zool. xix. p. 156 (1912).

♀. Head, thorax, and abdomen black-brown; frons with white points at sides; gulæ white; patagia with white patches at base; fore coxæ with white patches, the mid and hind femora white at extremities; abdomen with dorsal white point at base and three dorsal intersegmental bands towards extremity, the sides suffused with blue, the ventral surface with white bands except at extremity. Fore wing black-brown, the basal area with some metallic-green suffusion; postmedial green streaks above and below veins 6 and 2; a wedge-shaped hyaline mark in middle of cell and rounded spots in upper part of cell towards extremity and below middle of cell; a postmedial rounded hyaline spot above vein 6 and subterminal spots above and below vein 4, the spot above it small. Hind wing black-brown, the costal and inner areas suffused with metallic green and some green suffusion below middle of vein 2; an elongate hyaline spot below the cell and a spot beyond the cell. Underside of both wings suffused with brilliant metallic blue.

Hab. VENEZUELA, type † ♀ in Coll. Rothschild. *Exp.* 40 millim.

960. **Eupyra psittacus**, insert:—

Eupyra pinocha, Dogn. Ann. Soc. Ent. Belg. xli. p. 22 (1897).

The abdomen without the dorsal series of white spots.

* 962 *a*. **Tipulodes rubriceps.** (Plate XV. fig. 8.)

Tipulodes rubriceps, Dogn. Hét. Nouv. Am. Sud, v. p. 7 (1912).

♂. Head, tegulæ, and patagia scarlet; palpi, antennæ, thorax, and abdomen dark brown. Fore wing dark brown with a broad oblique scarlet fascia from base of inner margin to near termen below apex. Hind wing dark brown with the base scarlet; the underside with the costal area scarlet to beyond middle.

Hab. COLOMBIA, Medina (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 22 millim.

*963 *a*. **Callopepla grandis.** (Plate XV. fig. 9.)

Callopepla grandis, Roths. Nov. Zool. xix. p. 156 (1912).

♀. Head and thorax reddish brown tinged with grey and with some metallic blue; abdomen brown suffused with metallic blue, slightly on ventral surface. Fore wing black-brown; orange fasciæ in submedian fold and on vein 1 from near base to near termen; some diffused orange in lower part of terminal half of cell and in upper extremity of cell; a broad oblique orange band from below costa beyond the cell to near termen above and below vein 3, its inner edge angled inwards below end of cell. Hind wing black-brown with metallic blue streaks on basal area in the cell and on vein 1. Underside of fore wing with the postmedial orange band only, some blue suffusion on basal area; hind wing with some blue suffusion on basal and inner areas.

Hab. Brazil, Rio Grande do Sul, type † ♀ in Coll. Rothschild. *Exp.* 42 millim. This may be an aberration of *C. inachia*.

*971 *a*. **Cyanopepla beata.** (Plate XV. fig. 10.)

Cyanopepla beata, Roths. Nov. Zool. xix. p. 157 (1912).

♂. Head and thorax black-brown, the frons, vertex of head, tegulæ, patagia, and metathorax with patches of brilliant metallic blue; tibiæ with some metallic blue; abdomen black-brown with metallic blue bands. Fore wing black-brown; a metallic blue point at base of costa and short fascia on base of vein 1; a broad crimson fascia below the cell from base to termen, extending just into the cell above base of vein 2 and to above base of vein 3, then oblique to termen at vein 2 and extending to tornus. Hind wing black-brown with a crimson patch at apex, its inner edge indented at vein 6; the underside with metallic blue suffusion in cell to near extremity.

♀. Ventral surface of abdomen with the terminal segment yellow; hind wing with some crimson before termen from above vein 3 to submedian fold.

Hab. Panama, Chiriqui, type †♂, ♀ in Coll. Rothschild. *Exp.* 34 millim.

*971 *b*. **Cyanopepla baroni.** (Plate XV. fig. 11.)

Cyanopepla baroni, Roths. Nov. Zool. xix. p. 156 (1912).

Head and thorax red-brown, the frons, vertex of head, tegulæ, and metathorax with some metallic blue; shoulders with yellow patches; palpi yellow at base; coxæ yellow; mid and hind legs suffused with yellowish white; abdomen red-brown suffused with brilliant metallic blue, the ventral surface yellow. Fore wing red-brown, the costal edge yellow to beyond middle; a slight subbasal

crimson streak below the cell; cilia yellow at tips. Hind wing red-brown, the lower part of cell and area below it to submedian fold suffused with metallic blue; the area beyond the cell from vein 5 to submedian fold and the termen crimson; cilia yellow. Underside of fore wing with some metallic blue suffusion in and below the cell, a crimson patch beyond the cell between veins 6 and 2; hind wing with the basal area and inner margin suffused with metallic blue, the crimson beyond the cell extending to vein 7.

Hab. Ecuador, Zamora (*Baron*), type † ♂, ♀ in Coll. Rothschild. *Exp.* 38 millim.

977. **Cyanopepla submacula,** insert:—

Cyanopepla submacula, borealis, Roths. Nov. Zool. xix. p. 157 (1913), for subsp. 1.

Honduras, San Pedro Sula, type † ♂, ♀ in Coll. Rothschild.

981 *a*. **Cyanopepla samarca.** (Plate XV. fig. 12.)

Cyanopepla samarca, Schaus, Trans. Am. Ent. Soc. xxx. p. 135 (1904).

♂. Head, thorax, and abdomen black; largely shot with brilliant blue; palpi in front and greater part of legs white; abdomen with slight dorsal stripe, lateral series of spots and the ventral surface white. Fore wing black; some blue at base; the cell and area below it to submedian fold crimson, its upper edge running obliquely from the angle of cell to near termen at vein 4. Hind wing black with broad crimson fascia in and below the cell to near termen; the underside with some white below the cell.

Hab. Bolivia, Yungas-la-Paz, 1 ♂. *Exp.* 28 millim. Type † ♂ in U.S. Nat. Mus.

983. **Cyanopepla orbona,** insert:—

No. 966. *Charida similis*, Heyl.,

which has priority.

*994 *a*. **Cyanopepla hyaloptera.** (Plate XV. fig. 13.)

Cyanopepla hyaloptera, Dogn. Hét. Nouv. Am. Sud, i. p. 4 (1910).

♀. Head and thorax black-brown; palpi crimson at base; frons white at sides; back of head and gulæ crimson; vertex of thorax with slight bluish white streak; coxæ white; abdomen fuscous black tinged with bluish and with bluish white dorsal streak, the ventral surface suffused with white. Fore wing hyaline, the veins and marginal areas black; a metallic bluish white fascia on upper edge of the black inner area; an oblique black band from costa beyond middle, towards which it expands, to the terminal band above vein 2; the terminal band expanding on apical area, its inner edge evenly curved. Hind wing hyaline, the veins and margins black,

the terminal band dentate at submedian fold and emitting a wedge-shaped streak on vein 1 to middle; the underside with bluish white streak on base of costa and diffused streak along lower edge of the black costal area to well beyond middle.

Hab. Colombia, San Antonio (*Fassl*), type † ♀ in Coll. Dognin. *Exp.* 50 millim.

*994 *b*. **Cyanopepla perspicua.** (Plate XV. fig. 14.)

Cyanopepla perspicua, Schaus, Pr. U.S. Nat. Mus. xxix. p. 189 (1905).

♂. Head, thorax, and abdomen black shot with blue; palpi crimson at base, white in front; sides of frons and basal joint of antennæ in front white; gulæ and base of tegulæ crimson; thorax with white dorsal streak; coxæ white in front, legs streaked with white; abdomen with whitish dorsal streak on basal half, slight lateral streaks and the ventral surface white. Fore wing black, with a triangular hyaline patch from near base to near termen extending from discal fold in cell to submedian fold and to just below the fold at extremity, the veins remaining black; an oblique postmedial hyaline band from below costa to below vein 3, attenuate at lower extremity and divided into four by the black veins; a diffused white streak below submedian fold from base to beyond middle and a narrow streak on inner margin. Hind wing black shot with blue; hyaline streaks in lower part of cell, below the cell above and below submedian fold and on inner area and between veins 5 and 2, leaving a terminal band expanding towards tornus; cilia white at tips; the underside with the costa narrowly white.

Hab. Bolivia, Yungas-la-Paz, type † ♂ in U.S. Nat. Mus. *Exp.* 40 millim.

*997 *a*. **Cyanopepla girardi.** (Plate XV. fig. 15.)

Cyanopepla girardi, Dogn. Ann. Soc. Ent. Belg. xlvi. p. 229 (1902).

♂. Head and thorax black; frons, gulæ, back of head, and metathorax with white spots; shoulders and mesothorax with yellow spots; legs mostly white; abdomen brilliant blue with white dorsal points on last two segments and lateral spots on terminal segments, the ventral surface black banded with white. Fore wing black with a greenish tinge; large white spots in and below end of cell; cilia white-tipped at apex. Hind wing black shot with brilliant blue; cilia white; the underside with some white in and below base of cell and in end of cell.

Hab. Colombia, type † ♂ in Coll. Dognin. *Exp.* 34 millim.

*997 *b*. **Cyanopepla dognini.** (Plate XV. fig. 16.)

Cyanopepla dognini, Roths. Nov. Zool. xix. p.157 (1912).

♂. Head and thorax dull reddish brown, the back of head, base of tegulæ and shoulders orange; palpi with the basal joint orange,

the 2nd and 3rd joints orange in front; fore coxæ yellow, hind coxæ white; tibiæ streaked with white; abdomen dull red-brown at base, then black-brown with a slight bluish gloss, the anal tuft orange, the ventral surface reddish brown. Fore wing dark reddish brown; a quadrate creamy white spot in end of cell and slight diffused spot below end of cell; cilia white towards apex. Hind wing black-brown with a faint bluish gloss; cilia creamy white. Underside of fore wing with the spots in and below the cell pure white, the latter large.

Ab. 1. Fore wing without the spot below the cell.

Hab. PARAGUAY, Sapucay (*Foster*), type † ♂ in Coll. Rothschild, R. Burmajo, Paraña, Entre Rios. *Exp.* 36 millim.

Page 451. For *Trichodesma*, Hmpsn. 1898, nec Leconte Col. 1861, read **Desmotricha**, Hmpsn. A. M. N. H. (8) viii. p. 396 (1911).

*999 *a*. **Desmotricha metapolia.** (Plate XV. fig. 17.)

Desmotricha metapolia, Dogn. Hét. Nouv. Am. Sud, v. p. 8 (1912).

♂. Head and thorax dark reddish brown, the vertex of head, tegulæ and shoulders with some grey; palpi in front and frons pale yellowish; pectus and coxæ grey-white; abdomen dark reddish brown faintly tinged with blue except towards base, the ventral surface grey-white with narrow black-brown segmental bands. Fore wing dark reddish brown; the veins slightly streaked with grey to the broad oblique pale yellow band from just below costa beyond middle to just before termen above tornus. Hind wing dark brown tinged with blue-grey except on apical half of terminal area, the lower extremity of cell with some silvery blue in it; the underside blue-white, the costal area dark brown from near base expanding obliquely from middle to termen at vein 2, the cilia dark brown.

Hab. COLOMBIA, Medina (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 34 millim.

*999 *b*. **Desmotricha clagesi.** (Plate XV. fig. 18.)

Trichodesma klagesi, Roths. Nov. Zool. xix. p. 157 (1912).

Head pale yellow with a black patch on vertex; antennæ black; palpi with the basal joint, and the 2nd joint in front and at extremity yellow; thorax pale reddish brown, the tegulæ with pale yellowish patches, the patagia with yellow streaks at middle and on upper edge; pectus yellowish white; legs streaked with yellowish white; abdomen reddish brown, the ventral surface white. Fore wing dark reddish brown, the basal half with pale streaks on costa and veins and in submedian fold; a broad oblique yellow band from just below costa beyond middle to just before termen above tornus., Hind wing dark reddish brown, the lower part of cell and

the whole inner area with a greyish tinge; the underside with this area white.

Hab. Venezuela, Caura R., La Union; Brazil, Amazons, Fonte Boa (*Klages*), type † ♂ in Coll. Rothschild, R. Madeira, Calama (*Hoffmanns*). *Exp.* 38 millim.

*999 *c.* **Desmotricha perplexa.** (Plate XV. fig. 19.)

Trichodesma perplexa, Roths. Nov. Zool. xix. p. 158 (1912).

Head and thorax dark red-brown, the sides of head and tegulæ orange-yellow, the patagia with greyish streaks at middle and above; palpi with the basal joint and 2nd joint in front yellow; fore coxæ and femora streaked with white; abdomen dull red-brown with a bluish gloss towards extremity, the ventral surface pale grey-brown. Fore wing dark red-brown, the basal half with pale streaks on costa and veins and in submedian fold; a rather broad oblique yellow band from just below costa beyond middle to just before termen above tornus. Hind wing dark reddish brown, the inner margin with a greyish tinge; the underside with the lower part of cell and whole inner area white.

Hab. Brazil, Amazons, Fonte Boa (*Klages*), type † ♂ in Coll. Rothschild, Teffé (*M. de Mathan*), San Antonio do Javary (*Klages*). *Exp.* 36 millim.

*1001 *a.* **Desmotricha hoffmannsi.** (Plate XV. fig. 20.)

Trichodesma hoffmannsi, Roths. Nov. Zool. xix. p. 158 (1912).

Head pale yellow with brown patches on frons and vertex; antennæ blackish; palpi brown, the 1st joint and 2nd joint in front and at extremity yellow; thorax reddish brown, the tegulæ yellowish at base, the patagia with whitish streaks; coxæ white, the femora streaked with white; abdomen brown with a bluish gloss on dorsum and sublateral white fasciæ except at extremity. Fore wing dark reddish brown, the basal half with pale streaks on costa and veins and in submedian fold; a rather broad oblique yellow postmedial band from just below costa to just before termen above tornus, towards which it narrows somewhat. Hind wing dark reddish brown with a wedge-shaped yellow fascia in and below lower part of cell from near base to near termen, its extremity rounded; the underside with the inner area white.

Hab. Peru, Pozuzo, Huanuco (*Hoffmanns*), type † ♂ in Coll. Rothschild; Bolivia, Buenavista (*Steinbach*). *Exp.* 34 millim.

*1001 *b.* **Desmotricha trita.** (Plate XV. fig. 21.)

Trichodesma trita, Dogn. Hét. Nouv. Am. Sud, iii. p. 5 (1911).

Black-brown; base of palpi and gulæ yellowish. Fore wing with broad oblique yellow band from costa beyond middle to termen

above tornus towards which it narrows somewhat. Hind wing with traces of orange patch below angle of cell; more distinct and elongate on underside.

Hab. COLOMBIA (*Fassl*), type † ♀ in Coll. Dognin; ECUADOR, Paramba, ♂ in Coll. Dognin. *Exp.* 34 millim.

1001 *c*. **Desmotricha oceola.** (Plate XV. fig. 22.)

Trichodesma oceola, Dyar, Pr. U.S. Nat. Mus. xxxviii. p. 230 (1910).

♂. Head yellow, the vertex with black patch; palpi with the 2nd joint except in front and at extremity and the 3rd joint black; antennæ black; thorax black-brown, the tegulæ and patagia streaked with yellow; pectus and legs fuscous, the fore coxæ in front and patches below shoulders yellow, the legs streaked with whitish; abdomen black shot with blue, the ventral surface greyish. Fore wing black-brown; a yellow point at base of cell; the veins and submedian fold streaked with greyish to the oblique orange-yellow band from costa beyond middle to termen above tornus. Hind wing black-brown slightly shot with blue.

Hab. MEXICO; COSTA RICA, Juan Vinas (*Schaus*), 1 ♂; VENEZUELA. *Exp.* 38 millim.

*1001 *d*. **Desmotricha parva.** (Plate XV. fig. 23.)

Trichodesma parva, Roths. Nov. Zool. xix. p. 158 (1912).

♂. Head, thorax, and abdomen very dark brown; tegulæ at sides and shoulders with yellow spots; palpi with the basal joint white, the 2nd and 3rd whitish in front; sides of frons, basal joint of antennæ in front, and gulæ white; coxæ white, the femora and tibiæ streaked with white; ventral surface of abdomen white except the anal tuft. Fore wing narrow, black-brown; a broad oblique yellow band from just below costa beyond middle to below submedian fold above tornus, its lower extremity rounded. Hind wing black-brown. Underside of fore wing with some white on median nervure near base; hind wing with some whitish below base of cell.

Hab. VENEZUELA, Caura R., Maripa (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

1001 *e*. **Desmotricha albicincta.** (Plate XV. fig. 24.)

Trichodesma albicincta, Hmpsn. A. M. N. H. (7) xv. p. 430 (1905).

♂. Head, thorax, and abdomen black-brown; palpi in front and frons yellowish white; tegulæ in front and shoulders yellow; patagia with slight yellowish streaks; pectus and legs mostly white; abdomen with fine white segmental rings, the ventral surface white except anal segment. Fore wing black-brown; the costa, veins, and submedian fold with fine pale streaks on basal half; an oblique yellow band across end of cell from below costa

to vein 2. Hind wing black-brown with some yellow suffusion in and below the cell; a rather oblique yellow patch beyond the cell. Underside with slight white suffusion at base of both wings.

Hab. Venezuela, Caura Valley (*Klages*), 1 ♂ type. *Exp.* 30 millim.

1001*f*. **Desmotricha aurimacula.** (Plate XV. fig. 25.)

Trichodesma aurimacula, Schaus, Pr. U.S. Nat. Mus. xxix. p. 190 (1905).

Black-brown; palpi in front, sides of frons, and basal joint of antennæ in front white; tegulæ yellow in front; patagia with slight yellowish streaks and narrowly edged with white above; coxæ white, legs streaked with white; abdomen with fine white segmental lines, the ventral surface white except at extremity. Fore wing with the veins of basal area slightly streaked with yellowish white; an oblique yellow band just beyond the cell between veins 7 and 2. Hind wing with white fascia slightly irrorated with brown below the cell and in and beyond its lower extremity.

Hab. Venezuela, Caura Valley (*Klages*), type † ♂ in U.S. Nat. Mus., La Vuelta, 1 ♂; Fr. Guiana, St. Laurent Maroni, 1 ♀. *Exp.* 34 millim.

1003*a*. **Coreura cerealia.** (Plate XV. fig. 26 ♂, 27 ♀.)

Eucyane cerealia, Druce, A. M. N. H. (6) xx. p. 304 (1897).
Coreura hampsoni, Dogn. Ann. Soc. Ent. Belg. xlii. p. 212 (1898).
Coreura adamsi, Lathy, Entom. xxxii. p. 119 (1899).

♂. Black; palpi crimson below; metathorax, legs, and abdomen shot with brilliant blue; coxæ white in front. Fore wing with some brilliant blue at base of inner margin, cilia white-tipped at apex. Hind wing brilliant blue, the cilia crimson. Underside of fore wing shot with brilliant blue to the postmedial crimson band which is sinuous from below costa to termen above tornus. Hind wing with crimson terminal band with crenulate inner edge.

♀. Fore wing with curved postmedial orange band suffused and irrorated with crimson from below costa to above tornus: vein 5 coincident with 6; hind wing with terminal crimson band on upperside with crenulate inner edge.

Hab. Ecuador, Balsapamba, 1 ♂, type † in Coll. Joicey, Bános, 1 ♀ type *adamsi*. *Exp.* 46 millim. Type † *hampsoni* in Coll. Dognin.

*1004*a*. **Coreura engelcei.** (Plate XV. fig. 28.)

Coreura engelkei, Roths. Nov. Zool. xix. p. 158 (1912).

♂. Head and thorax dark brown tinged with grey and slightly glossed with blue; frons and spots on shoulders white; palpi except 3rd joint, pectus in front at sides, and tegulæ in front and at middle crimson; coxæ and streaks on femora and tibiæ white;

abdomen dark brown with a metallic blue gloss. Fore wing black-brown with a narrow oblique crimson band from below costa beyond middle to submedian fold above tornus, its edges rather diffused and irregular. Hind wing black-brown suffused with brilliant metallic blue, the cilia crimson except at base. Underside of fore wing shot with blue, the crimson band broader, the depressed streaks white, the cilia white towards apex; hind wing with the termen crimson except towards tornus.

Fore wing with vein 3 forking before termen on left side only.

Hab. Colombia, Sta. Marta, Onaca (*Engelke*), type † ♂ in Coll. Rothschild. *Exp.* 40 millim.

1005 *a*. Coreura simsoni.

Eucyane simsoni, Druce, P. Z. S. 1885, p. 521; Kirby, Cat. Het. p. 189.
Coreura euchromioides, Hmpsn. Cat. Lep. Phal. B.M. i. p. 453, ♀ (nec ♂).

Fore wing of male similar in structure to the females of Sect. I.

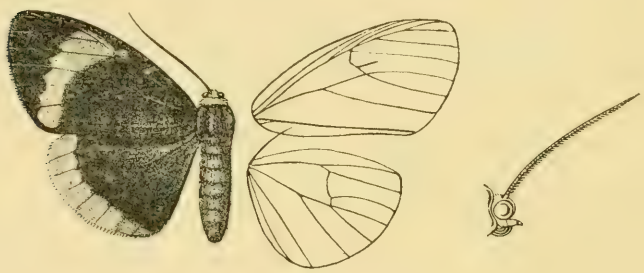

Fig. 39.—*Coreura simsoni*, ♂. ½.

Hab. Colombia, Bogotá, 2 ♀; Ecuador (*Buckley*), type † ♂ in Coll. Joicey. *Exp.* 64 millim.

1005 *b*. Coreura interposita.

Coreura interposita, Hmpsn. A. M. N. H. (7) viii. p. 173 (1901).

♂. Fore wing with vein 5 not anastomosing with 6 but with brands above and below it.

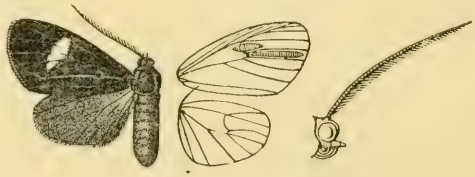

Fig. 40.—*Coreura interposita*, ♂. ½.

Black shot with blue; palpi orange at base; frons bluish white; neck with orange ring; patagia and thorax streaked with white; pectus orange in front; legs striped with white; abdomen with

diffused white stripe. Fore wing with whitish streak in submedian fold; an oblique white band beyond the cell between veins 7 and 2, attenuate below. Hind wing shot with brilliant metallic blue; the cilia white at tips.

Hab Venezuela, Porto Cabello (*Hahnel*), 1 ♂ type. *Exp.* 40 millim.

1006. **Coreura atavia**, insert :—

Calodesma fida, Hübn. Zutr. ex. Schmett, iii. p. 15, ff. 445–6 (1827); Kirby, Cat. Het. p. 189.

which has priority; and

Calimorpha venus, Prittw. Stett. Ent. Zeit. xxviii. p. 274 (1867).

*1007 *a*. **Aclytia albistriga.** (Plate XV. fig. 29.)

Aclytia albistriga, Schaus, A. M. N. H. (8) vi. p. 191 (1910), & A. M. N. H. (8) vii. p. 181 (1911).

♀. Head and thorax black-brown, palpi yellow at base; frons with lateral white points; back of head with pair of yellow spots; patagia with slight white streak and short streak on upper edge at base; a white line behind the eyes and yellow spot on outer edge of tegulæ; pectus and coxæ white, the femora streaked with white; abdomen black, dorsally suffused with brilliant metallic blue, the ventral surface with broad white stripe. Fore wing black, the base of inner margin slightly tinged with blue; slight whitish streaks on basal half of subcostal nervure and vein 1; a rather narrow oblique white band from below costa beyond middle to above tornus, rounded at extremities. Hind wing black with hyaline fascia below the cell and in and beyond lower angle of cell; a slight hyaline mark at base of inner area; the underside with bluish streak on basal part of costa.

Hab. Costa Rica, Guapiles (*Schaus*), type † ♀ in U.S. Nat. Mus. *Exp.* 34 millim.

*1007 *b*. **Aclytia pydna.** (Plate XV. fig. 30.)

Aclytia pydna, Druce, A. M. N. H. (7) iii. p. 231 (1899).

♂. Black-brown; palpi in front and frons greyish; back of head with two orange spots; thorax and patagia with greyish stripes; coxæ white; abdomen with the dorsal surface suffused with brilliant blue, the ventral surface white. Fore wing with slight yellow streaks on the veins; an oblique postmedial band from below costa narrowing to a point on vein 2. Hind wing deep black with hyaline fascia in, below, and beyond the cell and slight hyaline streaks on inner area.

Hab. Ecuador, Sarayacu (*Buckley*), type † ♂ in Coll. Joicey. *Exp.* 30 millim.

1008 *a*. **Aclytia jonesi.** (Plate XV. fig. 31.)

Aclytia jonesi, Roths. Nov. Zool. xix. p. 159 (1912).

♂. Head and thorax dark red-brown, the back of head, tegulæ at sides and shoulders with paired orange-yellow spots, the tegulæ

dorsally, patagia and dorsum of thorax with slight greyish streaks; palpi with the basal joint in front and behind and the 2nd joint in front white; frons edged with white; coxæ and streaks on femora white; abdomen dark red-brown with metallic blue bands except at base, interrupted dorsally, a ventral white fascia. Fore wing very dark chocolate-brown, the veins, cell, and submedian fold with pale streaks, whitish on basal half; a round orange-yellow spot on upper discocellular. Hind wing black-brown, the lower part of cell and a broad fascia below and just beyond lower angle of cell hyaline. Underside of fore wing with the inner area whitish, hind wing with whitish streaks on base of inner area.

Hab. Brazil, 1 ♂, São Paulo (*D. Jones*), 2 ♂, Castro Paraña (*D. Jones*), 1 ♂. *Exp.* 30–32 millim. Type † ♂ in Coll. Rothschild.

*1009 *a*. **Aclytia hoffmannsi.** (Plate XV. fig. 32.)

Aclytia hoffmannsi, Roths. Nov. Zool. xix. p. 160 (1912).

♂. Head and thorax reddish brown, the head behind antennæ and sides of thorax with yellow spots; the patagia and dorsum of thorax with greyish streaks; palpi with the 1st joint yellow in front and behind, the second joint whitish in front, the sides of frons white; coxæ and streaks on femora white; abdomen dorsally metallic blue, the base and anal tuft brown, the ventral surface brown with broad white fascia except at extremity. Fore wing red-brown, the veins, cell, and submedian fold with slight pale streaks; a rounded yellow spot beyond the cell extending to below costa. Hind wing black-brown, the lower part of cell towards extremity, a fascia below it and just beyond its lower extremity hyaline; some hyaline at base of inner area. Underside of fore wing with the yellow patch triangular and extending to below vein 4; hind wing with the basal half of inner area whitish.

Hab. Peru, Huanuco (*Hoffmanns*), type † ♂ in Coll. Rothschild, Chanchamayo. *Exp.* 34 millim.

1012 *a*. **Aclytia mictochroa,** n. sp. (Plate XVI. fig. 1.)

♀. Head and thorax dark red-brown, the back of head, tegulæ at sides, and shoulders with paired yellow spots, the dorsum of tegulæ and the patagia with slight greyish streaks; palpi whitish in front and behind; fore coxæ yellow, the mid and hind coxæ white, the femora with whitish streaks; abdomen black-brown with lateral metallic blue bands except towards base and extremity and ventral orange-yellow fascia. Fore wing dark chocolate-brown with pale streaks on the veins and in cell and submedian fold; an oblique yellow band from below costa beyond middle to vein 1 above tornus towards which it narrows somewhat. Hind wing black-brown with the lower part of cell and a fascia below the cell and just beyond lower angle hyaline.

Hab. Brazil, Castro Paraña (*D. Jones*), 2 ♀ type. *Exp.* 34 millim.

1012 *b*. **Aclytia flavicaput.** (Plate XVI. fig. 2.)

Aclytia flavicaput, Roths. Nov. Zool. xix. p. 159 (1912).

♂. Head and thorax dark red-brown; palpi with the basal joint yellow, the 3rd joint with a pale ring at base; frons with yellow spots at sides above; the back of head with yellow patches, the tegulæ yellow at base; coxæ yellow; abdomen black-brown with metallic blue bands interrupted dorsally towards base, a ventral orange-yellow fascia except at extremity. Fore wing deep chocolate-brown with slight pale streaks on the veins and in cell and submedian fold. Hind wing black-brown, the lower part of cell and a fascia below the cell and beyond its lower extremity hyaline; the basal half of inner area with two hyaline streaks. Underside of fore wing with diffused yellow mark below costa at end of cell, the inner area whitish.

Hab. Cuba, Santiago (*Schaus*), 1 ♂, Alto del Cedro (*Schaus*), 3 ♂; Colombia, Sta. Marta, Onaca; Venezuela, Caura R., Maripa (*Klages*), type † ♂ in Coll. Rothschild, La Union, La Vuelta; Surinam, Paramaribo. *Exp.* 32 millim.

1015. **Aclytia bractea**, insert (syn.):—

Aclytia affinis, Roths. Nov. Zool. xix. p. 159 (1912).

Venezuela, Caura Valley, La Union (*Klages*), type † ♂ in Coll. Rothschild.

1015 *a*. **Aclytia clagesi.** (Plate XVI. fig. 3.)

Aclytia klagesi, Roths. Nov. Zool. xix. p. 159 (1912).

♂. Head and thorax dark red-brown, the vertex of head with some metallic green; coxæ white; abdomen dark reddish brown with metallic green dorsal spots on four basal segments and broad lateral bands on all the segments, the ventral surface white except at extremity. Fore wing dark chocolate-brown. Hind wing black-brown, the lower part of cell and a fascia below the cell and just beyond its lower extremity hyaline; some hyaline at base of inner area. Underside of fore wing with the inner area whitish.

Hab. Venezuela, Caura R. (*Klages*), 10 ♂, La Union, Maripa, type † ♂ in Coll. Rothschild; Bolivia, Yungas de Coroico. *Exp.* 34–36 millim.

*1015 *b*. **Aclytia cœruleonitens.** (Plate XVI. fig. 4.)

Aclytia cœruleonitens, Roths. Nov. Zool. xix. p. 159 (1912).

♂. Head and thorax reddish brown; yellow spots on the head behind antennæ and at sides of tegulæ; palpi with the 1st joint yellow with a dark spot; sides of frons and basal joint of antennæ in front white; coxæ white, the femora streaked with white; abdomen dorsally metallic green, the base and anal tuft brown, the ventral surface brown with a white fascia except at extremity.

Fore wing dull reddish brown, the veins, cell, and submedian fold with slightly paler streaks. Hind wing black-brown, the lower part of cell and a fascia below it and just beyond its lower extremity hyaline; some hyaline at base of inner area. Underside of fore wing with yellow spot beyond upper angle of cell; hind wing with the basal half of inner area whitish.

Hab. Bolivia, Buenavista (*Steinbach*), type † ♂ in Coll. Rothschild. *Exp.* 34 millim.

1015 *c*. **Aclytia reducta.** (Plate XVI. fig. 5.)

Aclytia reducta, Roths. Nov. Zool. xix. p. 160 (1912).

♂. Head and thorax black-brown, the prothorax with pair of white points, the patagia with greyish streaks; palpi with the 1st joint white in front, the 2nd grey in front, the sides of frons white; coxæ and streaks on the femora white; abdomen dark brown with lateral series of metallic green bands except at base, the ventral surface with white fascia except at extremity. Fore wing black-brown, the basal half with slight pale streaks on the veins and in submedian fold; a round yellow spot beyond the cell. Hind wing black-brown, the lower part of cell and a fascia below it and just beyond its lower extremity hyaline; a hyaline streak at base of inner area. Underside of fore wing with the inner area whitish.

Hab. Venezuela, Caura Valley (*Klages*), 4 ♂, Maripa (*Klages*), type † ♂ in Coll. Rothschild; Brazil, Amazons, Santarem (*Bates*), 1 ♂. *Exp.* 30 millim.

1018 *a*. **Uraga rubricollis.**

Uraga rubricollis, Hmpsn. A. M. N. H. (7) viii. p. 173 (1901).

♀. Fore wing with vein 7 from 8 before 9.

Fuscous black; palpi scarlet at base; frons white at sides; neck with scarlet ring; coxæ whitish; abdomen dorsally slightly suffused

Fig. 41.—*Uraga rubricollis*, ♀. ½.

with blue, the ventral surface with diffused whitish fascia. Fore wing with oblique white band from subcostal nervure across end of cell to just below vein 2. Hind wing shot with metallic blue.

Hab. Colombia, 1 ♀ type. *Exp.* 40 millim.

*1018 *b*. Uraga trifida.

Uraga trifida, Dogn. Ann. Soc. Ent. Belg. lii. p. 153 (1908).

Palpi with the 3rd joint short; antennæ with moderate branches; fore wing with a recurrent vein in cell from near lower angle.

♂. Head and thorax dark olive-brown; frons at sides and vertex of head with white points; gulæ white; neck with crimson ring; tegulæ and patagia with patches of white scales; thorax with white dorsal streak; coxæ white; legs streaked with white on inner side; abdomen black shot with blue, a maculate white dorsal stripe, sublateral series of white spots, and the ventral surface white. Fore wing dark red-brown, the interspaces suffused with greyish olive-yellow to end of cell and tornus and the veins of terminal area slightly defined by olive; a triangular thinly scaled patch

Fig. 42.—*Uraga trifida*, ♂. ½.

above base of vein 2; three obliquely placed semihyaline elongate postmedial spots between veins 7 and 4. Hind wing black-brown, the costal area, the cell except upper extremity, and the area just below it white with the veins on it dark; the inner margin white. Underside of fore wing with some white at base below costa and in cell and some white suffusion in and below end of cell; hind wing with elliptical subapical white patch, the terminal area shot with blue.

Hab. Peru, Cagon, type † ♂ in Coll. Dognin. *Exp.* 38 millim.

*1022 *a*. Euagra delectans. (Plate XVI. fig. 6.)

Euagra delectans, Schaus, A. M. N. H. (8) vii. p. 612 (1911).

♂. Head crimson; palpi black at tips; antennæ black; thorax and abdomen black shot with metallic blue, the pectus with some crimson in front at sides, the coxæ and ventral surface of abdomen except at extremity white. Fore wing black shot with blue; a metallic blue streak above basal half of vein 1; a triangular hyaline patch above vein 2 from the cell to just before termen. Hind wing black shot with brilliant blue; a hyaline fascia below the cell and above vein 2 to near termen; the underside with the basal half of costal edge white.

Hab. Costa Rica, Juan Vinas (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 38 millim.

*1029 *a*. Euagra clagesi. (Plate XVI. fig. 7.)

Euagra klagesi, Roths. Nov. Zool. xix. p. 160 (1912).

Head and thorax black-brown; basal joint of palpi, gulæ, and back of head crimson; frons white; metathorax with metallic blue patch; the coxæ, streaks on fore femora and the extremities of hind femora and tibiæ white; abdomen black-brown suffused with metallic blue, a slight dorsal streak except at extremity, the sides at base and a ventral fascia white. Fore wing black-brown; some metallic blue at base of inner area; a slight white streak below basal half of costa; a hyaline streak in the cell towards extremity and an oblique patch between veins 4 and 2 extending to towards termen. Hind wing black-brown suffused with brilliant metallic blue, with a broad hyaline fascia from base of inner area below the cell to beyond its extremity. Underside of fore wing with slight white streaks below base of cell and before origin of vein 2.

Hab. Surinam, Albina (*Klages*), type † ♂, ♀ in Coll. Rothschild. *Exp.* 36–40 millim.

*1033 *a*. Micragra ætolia.

Eucereon ætolia, Druce, A. M. N. H. (7) v. p. 507 (1900).

♀. Fore wing with vein 6 from well below angle of cell; 10 from cell.

Head and thorax yellowish white; palpi banded with fuscous; antennæ with the branches black; frons, vertex of head, tegulæ, patagia, and mesothorax with fuscous patches; metathorax with fuscous streak; pectus and legs whitish, the latter streaked with fuscous; abdomen fuscous, the extremity orange, the ventral surface whitish. Fore wing fuscous black; some white points at base; an antemedial series of small spots angled outwards below

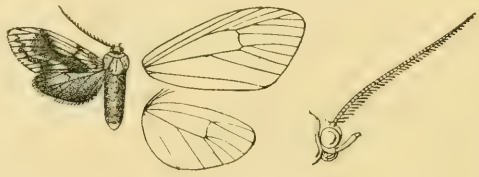

Fig. 43.—*Micragra ætolia*, ♀. ½.

costa, then oblique; a postmedial series of small spots strongly excurved from costa to vein 4 then very oblique to middle of inner margin; a white streak on inner margin; a series of spots on or just before termen. Hind wing semihyaline white; the veins fuscous; the inner and terminal areas suffused with fuscous, the latter widely on apical and tornal areas.

Hab. Colombia, Minca, 2000′ (*H. H. Smith*), type † ♀ in Coll. Joicey. *Exp.* 30 millim.

*1034 *a*. **Mevania basalis.** (Plate XVI. fig. 8.)

Nelo basalis, Wlk. xxxi. 184 (1864).
Microgiton latona, Druce, P. Z. S. 1890, p. 499.

♂. Black; neck orange; patagia with some blue scales; abdomen with metallic blue segmental bands. Fore wing with two blue points at base; a broad oblique orange-yellow medial band with rather sinuous outer edge. Hind wing with large oblique orange-yellow triangular patch from medial part of costa to vein 2 near termen. Underside with blue suffusion on basal area; fore wing with diffused blue patch beyond lower angle of cell; hind wing with the broad yellow band reaching inner margin just above tornus.

Hind wing with vein 5 from just above angle of cell.

Hab. Colombia, Bogota, 1 ♂ type; Ecuador, Intaj (*Buckley*), type † ♂ *latona* in Coll Joicey. *Exp.* 30 millim.

1034 *b*. **Mevania larissa.**

Microgiton larissa, Druce, P. Z. S. 1890, p. 499.
Mevania quadricolor, Hmpsn. Cat. Lep. Phal. B. M. i. p. 467, fig. 253.

♂. Head and thorax black-brown suffused with metallic blue; neck with orange ring; legs streaked with white; abdomen black-brown with dorsal series of metallic blue bands, the ventral surface with the basal half white. Fore wing black-brown; some metallic blue at base of vein 1; an obliquely curved pale yellow band from just below middle of costa to vein 1. Hind wing pale yellow; some brown suffusion at base; the terminal area broadly brown, especially towards costa. Underside of fore wing with the base suffused with metallic blue, the retinaculum and a streak on base of vein 1 white; hind wing with brown patch suffused with metallic blue at base of costa.

Hab. Ecuador, Bános (*Stewart*), 1 ♂. *Exp.* 32 millim. Type † ♀ in Coll. Joicey.

1034. **Mevania quadricolor.** (Plate XVI. fig. 9.)

1034 *c*. **Mevania albofasciata.** (Plate XVI. fig. 10.)

Propyria albofasciata, Roths. Nov. Zool. xix. p. 183 (1912).

♀. Head and thorax black-brown with some metallic blue suffusion; neck with yellow ring; palpi yellow at base; abdomen black-brown with segmental metallic blue dorsal bands. Fore wing black-brown; some metallic blue at base; an oblique white medial band from just below costa to inner margin. Hind wing black-brown with oblique conical white patch from middle of costa to just below vein 2. Underside of both wings with the

basal half suffused with blue; the white patch of hind wing extending to submedian fold and somewhat curved inwards at lower extremity.

Hab. Peru, Chanchamayo (*Simons*), type † ♀ in Coll. Rothschild; Bolivia, Tanampico (*Garlepp*), 1 ♀. *Exp.* 36 millim.

*1038 *a*. **Agyrta vitrea.** (Plate XVI. fig. 11.)

Agyrta vitrea, Schaus, A. M. N. H. (8) vi. p. 191 (1910).

♀. Head black-brown; palpi white in front and crimson at base; frons white at sides, crimson patches on vertex of head and behind the eyes; thorax black-brown shot with blue, a slight dorsal white streak; pectus with white patches; legs streaked white and black; abdomen black shot with blue, a dorsal bluish white streak, the ventral surface white. Fore wing black; a bluish white streak below basal half of submedian fold; a triangular hyaline patch from near base to below submedian fold towards termen extending into lower part of cell and above base of vein 2, the veins on it black; an oblique hyaline white band from below costa beyond middle to vein 3 near termen, rounded below. Hind wing black shot with blue, the lower part of cell, the area below it and inner area with hyaline streaks, extending beyond the cell from above vein 5 to vein 2, the outer edge of the hyaline area rounded; cilia white at tips; the underside with the costa white to beyond middle.

Hab. Costa Rica, Guapiles (*Schaus*), type † ♀ in U.S. Nat. Mus. *Exp.* 44 millim.

1039. **Agyrta micilia**, insert (syns.):—

Hypocrita tineiformis auxo, Hübn. Samml. Exot. Schmett. i. ♀ nec ♂.
Agyrta collaris, Kirby, Wytsman's Hübner, p. 119 (1902).

*1040 *a*. **Agyrta garleppi.** (Plate XVI. fig. 12.)

Agyrta chena, garleppi, Roths. Nov. Zool. xix. p. 161 (1912).

Head and thorax black-brown, the latter suffused with metallic blue; palpi with the basal joint crimson, the 2nd white in front; frons and basal joint of antennæ in front white; back of head crimson; base of tegulæ and slight streaks on the patagia white; pectus in front at sides crimson; coxæ and streaks on the legs white; abdomen black suffused with metallic blue, a dorsal white fascia, the ventral surface white. Fore wing black-brown slightly glossed with blue; a white fascia along vein 1; fasciæ in lower part of cell and below the cell and vein 2 and an oblique wedge-shaped patch above vein 2 to near termen hyaline; an oblique hyaline subapical patch between veins 6 and 4. Hind wing black-brown

glossed with metallic blue; a hyaline fascia below the cell and vein 4 from near base to near termen, the inner area whitish.

Hab, Peru, R. Colorado (*Watkins*), 3 ♀; Bolivia, R. Suapi (*Garlepp*), 1 ♂, Yungas de Coroico (*Garlepp*), type † ♂ in Coll. Rothschild, Yungas de la Paz, R. Tanampaya, R. Cachiaco. *Exp.* 34 millim.

*1040 *b*. Agyrta bifasciata. (Plate XVI. fig. 13.)

Agyrta bifasciata, Roths. Nov. Zool. xix. p. 161 (1912).

♀. Head and thorax dark brown, the latter glossed with blue behind; 1st joint of palpi, gulæ, and back of head crimson; frons white; dorsum of thorax and patagia streaked with white; pectus in front at sides crimson; coxæ suffused with white; abdomen dark brown glossed with blue, a white dorsal streak and the ventral surface white. Fore wing dark brown; a bluish white fascia above basal half of vein 1; an elongate hyaline spot in cell towards extremity, an oblique wedge-shaped patch above vein 2 and streak below it; an oblique white postmedial patch between veins 6 and 4. Hind wing dark brown; a hyaline fascia below the cell and vein 4 from near base to towards termen; the base of inner margin white; cilia white at tips towards apex.

Hab. Br. Guiana, R. Demerara, type † ♀ in Coll. Rothschild. *Exp*. 38 millim.

*1041 *a*. Agyrta varuna. (Plate XVI. fig. 14.)

Agyrta varuna, Druce, A. M. N. H. (7) xix. p. 299 (1907).
Agyrta lacteicolor, Roths. Nov. Zool. xix. p. 161 (1912).

♂. Head and thorax black; palpi crimson at base, the gulæ with white and crimson lines; frons at sides and vertex of head with white spots; antennæ with the shaft white above; thorax with white dorsal stripe edged with metallic blue; legs white striped with black; abdomen blackish suffused with metallic blue, a white dorsal stripe except at extremity, white lateral streaks and the ventral surface white. Fore wing black with semihyaline white streak in lower medial part of cell, fascia below the cell attenuate at extremities and patch above base of vein 2; a few metallic blue scales at base of inner margin and an oblique semihyaline white subapical patch from vein 6 to below 5. Hind wing black suffused with blue; the cell and area below it to inner margin, where it extends to tornus, very pale yellow; the underside with the costa white to near apex, a diffused white subapical spot.

Hab. Peru, Piches Road, type † ♂ in Coll. Joicey; Pozuzo (*Hoffmanns*), type † ♂ *lacteicolor* in Coll. Rothschild. *Exp*. 40 millim.

*1043 *a*. **Agyrta conspicua.** (Plate XVI. fig. 15.)

Agyrta conspicua, Schaus, A. M. N. H. (8) vii. p. 181 (1911).

♂. Head crimson, the palpi at tips and antennæ black; thorax black shot with metallic blue; coxæ white, the legs streaked with white; abdomen black shot with metallic blue, a slight whitish dorsal streak except towards extremity, the ventral surface suffused with white. Fore wing black, the costa to near apex and the inner margin to middle shot with blue; a triangular hyaline patch from below the cell near base to vein 2 towards termen, extending into lower part of cell, its outer edge obliquely curved, the veins on it black. Hind wing black shot with blue; a hyaline fascia in lower part of cell, below the cell and above basal half of veins 3 and 2; cilia white at tips towards tornus; the underside with the costal edge white to middle.

Hab. Costa Rica, Tuis (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 50 millim.

*1044 *a*. **Agyrta pulchriformis.** (Plate XVI. fig. 16.)

Agyrta pulchriformis, Roths. Nov. Zool. xix. p. 163 (1912).

♂. Head, thorax, and abdomen dark brown glossed with blue; palpi at base and the 2nd joint in front white; frons white; tegulæ and patagia streaked with white; coxæ white; pectus, legs, and ventral surface of abdomen irrorated with white. Fore wing black-brown; an elongate hyaline patch below the cell and vein 2 from near base to towards termen, its extremities pointed; an oblique hyaline subapical bar between veins 6 and 4. Hind wing black-brown, the cell and a fascia below it and just beyond its lower extremity hyaline, extending to near termen as the cell is very long; the inner area irrorated with white.

Hab. Peru, R. Inambari, La Oroya (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

*1044 *b*. **Agyrta clagesi.** (Plate XVI. fig. 17.)

Agyrta klagesi, Roths. Nov. Zool. xix. p. 162 (1912).

Head and thorax black; patches on frons, tegulæ, and shoulders and streaks on patagia metallic blue; palpi in front and basal joint of antennæ in front white; coxæ and streaks on the legs white; abdomen black with metallic blue suffusion at base and sides, a white dorsal streak and sublateral white fasciæ. Fore wing black with metallic blue streaks below costa and on vein 1 to middle; an oblique hyaline patch from upper angle of cell to above vein 2, rounded at extremities; a white apical spot. Hind wing black-brown; a hyaline fascia in lower part of cell and below and just beyond the cell. Underside of fore wing glossed with blue except the inner area, some white on base of costa and median nervure; hind wing with the basal half of costal area glossed with blue.

Hab. Venezuela, Caura R., La Vuelta (*Klages*), type † ♂, ♀ in Coll. Rothschild, Guyapa, Maripa. *Exp.* 38 millim.

*1044 *c*. **Agyrta mathani.** (Plate XVI. fig. 18.)

Agyrta mathani, Roths. Nov. Zool. xix. p. 161 (1912).

♀. Head and thorax black, the frons, vertex of head, tegulæ, and metathorax with metallic blue patches, the patagia with blue and greyish streaks at edges; coxæ and femora streaked with white; abdomen black suffused with metallic blue, a slight dorsal white streak and pair of ventral fasciæ. Fore wing black with brilliant metallic blue fasciæ below costa and on vein 1 to beyond middle; an oblique hyaline band from upper angle of cell to just above vein 2 towards termen with some metallic blue suffusion beyond it; cilia white towards apex. Hind wing black suffused with metallic blue; a hyaline fascia in, below, and beyond the cell. Underside of fore wing glossed with blue, some white below base of cell.

Hab. Colombia, Muzo (*M. de Mathan*), type † ♀ in Coll. Rothschild, Cundinamarca, Cananche; Ecuador, Paramba. *Exp.* 42 millim.

1047. **Phara flavicosta**, insert:—

Phara flavicosta, missionum, Jörgensen, Zeits. Wissens. Insektenbiol. ix. p. 76, fig. 5 (1913).

Abdomen with the band whitish yellow.
Argentina, Missiones.

*1049 *a*. **Phara sanguipalpis.** (Plate XVI. fig. 19.)

Phara sanguipalpis, Dogn. Ann. Soc. Ent. Belg. li. p. 224 (1907).

♀. Head and thorax black; palpi crimson except 3rd joint; vertex of head crimson with narrow black dorsal streak; abdomen black suffused with metallic blue. Fore wing black-brown with a greyish tinge; the cilia tipped with white towards tornus. Hind wing blue-black, the cilia tipped with white towards tornus.

Hab. Peru, Cagon, type † in Coll. Dognin. *Exp.* 30 millim.

*1055 *a*. **Ptychotrichos elongata.** (Plate XVI. fig. 20.)

Ptychotrichos elongata, Schaus, Pr. U.S. Nat. Mus. xxix. p. 190 (1905).

♂. Head and thorax greyish brown, the palpi, frons, vertex of head, and greater part of tegulæ fuscous; patagia with orange streak near upper edge which is fuscous; metathorax with orange spot; pectus and legs brown; coxæ and base of legs white, the fore coxæ yellow behind, the fore femora streaked with white, the tarsi ringed with white; abdomen orange with large dorsal fuscous brown patch extending to 4th segment, the terminal segments with black lines, the extremity black, the anal tuft white; the ventral

surface white with sublateral streaks with white points on them and the extremity blackish. Fore wing fuscous brown, the veins streaked with olive-grey; two oblique grey antemedial lines from submedian fold to inner margin; large blackish orbicular and reniform spots defined by grey and extending to well below the cell, the former irregularly rounded, the latter constricted at middle, the area between, beyond, and below them grey; a pale postmedial irregular line, oblique from costa to below 4, then very oblique to inner margin near antemedial line; a terminal series of dentate dark marks defined by pale ochreous, forming a dentate subterminal line towards costa. Hind wing hyaline, the veins dark brown; the inner area suffused with brown; the termen irregularly brown.

Hab. Brazil, Rio Janeiro, type † ♂ in U.S. Nat. Mus. *Exp.* 48 millim.

Page 478. Under **Neacerea** insert:—

	Type.
Delphyre, Wlk. ii. 537 (1854)	*hebes*.

which has priority; and

Nodoza, Schaus, J. N.Y. Ent. Soc. iv. p. 150 (1896)	*hebes*.

1056. Delphyre brunnea.

Neacerea brunnea, Druce, A. M. N. H. (7) ii. p. 226 (1898).

1056 *a*. Delphyre hebes. (Plate XVI. fig. 21.)

Delphyre hebes, Wlk. ii. p. 537 (1854); Kirby, Cat. Het. p. 363.
Nodoza tristis, Schaus, J. N.Y. Ent. Soc. iv. p. 150 (1896).

♂. Black-brown; palpi in front and pectus greyish. Fore wing with obscure discoidal spot. Hind wing blacker with obscure semihyaline streak above and below median nervure.

Hab. Honduras, 1 ♀ type; Porto Rico; Venezuela, Caura Valley (*Klages*), 3 ♂; Br. Guiana, Demerara (*Rodway*), 1 ♂; Brazil, São Paulo (*D. Jones*), 1 ♂, Castro Paraña, type † *tristis* in U.S. Nat. Mus. *Exp.* 24 millim.

*1056 *b*. Delphyre macella.

Neacerea macella, Dogn. Hét. Nouv. Am. Sud, ii. p. 11 (1911).

Fore wing of male on underside with nacreous scaling from cell to inner margin except at termen; hind wing with nacreous scaling on upperside except at termen, the submedian fold with fringe of black hair, the discocellulars straight and oblique.

♂. Head and thorax black-brown mixed with some greyish, the back of head with two crimson points; coxæ, the extremity of hind femora and the extremities of tibiæ white; abdomen crimson with dorsal white spots on two basal segments and black-brown band before the anal tuft, the ventral surface white, the terminal segments black-brown with slight white segmental lines. Fore

wing black-brown, the base and antemedial area suffused with greyish; a rather quadrate semihyaline white spot in middle of cell; an oblique whitish line from near origin of vein 2 to vein 1; postmedial semihyaline whitish spots above and below vein 6 and larger spots nearer the termen above and below vein 4; a greyish

Fig. 44.—*Delphyre macella*, ♂. ½.

subterminal line, excurved below vein 7, incurved below vein 2 and terminating at vein 1; a white spot on termen and cilia below apex. Hind wing nacreous white; the submedian fold with fringe of black hair; the costa black; the termen black, very narrowly towards apex and expanding from vein 3 to tornus; the underside fuscous brown, the inner area white except towards termen.

Hab. Fr. Guiana, Nouveau Chantier (*Le Moult*), type † ♂ in Coll. Dognin. *Exp.* 24 millim.

*1056 *c.* **Delphyre germana.** (Plate XVI. fig. 22.)

Heliura germana, Roths. Nov. Zool. xix. p. 167 (1912).

♂. Head and thorax dark brown, the back of head with two crimson spots, the patagia and dorsum of thorax with paired greyish streaks; coxæ and mid and hind femora and tibiæ at extremities white; abdomen black-brown with a white spot at base of dorsum, the ventral surface white except towards extremity with brown ventral line. Fore wing dark brown tinged in parts with greyish, the basal half of submedian fold with diffused greyish streak; a rather quadrate hyaline spot in middle of cell; a greyish discoidal striga and a grey medial line defined on inner side by black-brown from vein 2 to inner margin; a greyish postmedial mark on costa and a series of hyaline whitish spots between veins 7 and 3, the spots between veins 5 and 3 elongate; a greyish subterminal line excurved below vein 7 and incurved in submedian interspace; a small whitish apical spot. Hind wing silvery white with dark brown fasciæ on vein 1 and inner margin; the termen dark brown, rather broadly at tornus, narrowing to a point at vein 5, and the cilia only brown towards apex. Underside of fore wing dark-brown with the spots and inner area white; hind wing dark brown with the submedian interspace and inner area white except towards termen.

Hab. Surinam, Marœwym Valley, Arœwarwa Creek (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

*1057 *a*. Delphyre meridionalis. (Plate XVI. fig. 23.)

Heliura klagesi, meridionalis, Roths. Nov. Zool. xix. p. 167 (1912).

♂. Head and thorax black-brown; the back of head with pair of yellow spots, the metathorax with yellow bar; a grey bar above frons, the edges of tegulæ and patagia and streaks on thorax grey; coxæ yellow; femora streaked with white; abdomen black-brown, the 4th, 5th, and 6th segments with crimson segmental lines, the ventral surface whitish at base. Fore wing black-brown; some grey at base of costa and the veins streaked with greyish; obliquely placed greyish antemedial marks below costa and in cell; a semihyaline whitish patch below middle of cell with sinuous greyish line from its outer edge to inner margin; a small quadrate semihyaline spot in upper part of middle of cell with bar from it to median nervure; a postmedial series of semihyaline whitish spots from costa to vein 3, excurved below vein 5; a sinuous grey subterminal line from costa to the excurved spots and from them to inner margin; cilia whitish between veins 3 and 2. Hind wing black-brown, the cell and area below it and just beyond its lower angle hyaline. Underside of fore wing black-brown with the white spots prominent.

Hab. Surinam, Marœwyn Valley, Arœwarwar Creek (*Klages*), type † ♂ in Coll. Rothschild; Brazil, Amazons, R. Madeira, Calama; Peru, Carabaya, R. Huacamayo, La Union. *Exp.* 38 millim.

1057 *b*. Delphyre rhodocrypta. (Plate XVI. fig. 24.)

Neacerea rhodocrypta, Druce, A. M. N. H. (7) xv. p. 463 (1905).
Heliura klagesi, Roths. Nov. Zool. xix. p. 167 (1912).

♂. Head and thorax blackish with grey streaks; back of head with two slight crimson marks; metathorax with whitish patch; coxæ whitish tinged with crimson; abdomen black, the ventral surface pinkish white at base, some specimens with traces of crimson lateral segmental lines. Fore wing black, the veins grey, some grey at base, the antemedial area suffused with grey leaving a slight black streak below the cell and an oblique streak above vein 1 and obliquely placed antemedial spots above and below vein 1; a round black spot in middle of cell followed by a small triangular white spot; an elongate whitish mark below middle of cell; two white spots beyond the cell, and white spots nearer termen between veins 5 and 3; an irregular subterminal grey line. Hind wing black-brown, the cell, area below it, and inner area hyaline.

♀. Abdomen with distinct lateral segmental crimson lines.

Hab. Venezuela, Caura Valley (*Klages*), 3 ♂, 1 ♀, La Union (*Klages*), type † ♂, ♀ *klagesi*, in Coll. Rothschild. *Exp.* 34 millim.

*1058 *a*. **Delphyre roseiceps.** (Plate XVI. fig. 25.)

Delphyre roseiceps, Dogn. Ann. Soc. Ent. Belg. liii. p. 217 (1909).
Eucereon integrum, Roths. Nov. Zool. xix. p. 172 (1912).

Head and thorax brownish grey; palpi and antennæ black, the latter with the shaft whitish above towards base, the back of head pink, the tegulæ, meso- and metathorax with black spots, the patagia with two black stripes, the bases of legs pink; abdomen pink with lateral stripes and the extremity black. Fore wing brownish grey, the costal and inner area to beyond middle with a fuscous tinge; three subbasal black spots, the lowest elongate; obliquely placed antemedial spots on costa and in cell and spots above and below vein 1; a spot in upper extremity of cell and two beyond it, an elongate spot in lower extremity and spots below bases of veins 5, 4, 3; three postmedial spots between costa and vein 5 and an incurved series of small spots between vein 3 and inner margin; a subterminal series of small spots. Hind wing fuscous with the cell semihyaline white.

Hab. Fr. Guiana, St. Laurent Maroni, type † ♀ in Coll. Dognin; Brazil, Amazons, Fonte Boa (*Klages*), type † ♂ *integrum* in Coll. Rothschild. *Exp.* 22 millim.

1058. **Delphyre minuta**, insert (syns.). (Plate XVI. fig. 26.).

Eucereon trinita, Schaus, J. N.Y. Ent. Soc. ix. p. 44 (1901).
Heliura griseipuncta, Roths. Nov. Zool. xix. p. 170 (1912).

Hab. Trinidad, type † ♀ *trinita* in U.S. Nat. Mus.; Venezuela; Br. Guiana (*Bartlett*), 1 ♂, Demerara, type † ♂ *griseipuncta* in Coll. Rothschild; Fr. Guiana, St. Laurent Maroni (*Schaus*), 1 ♀; Surinam, type † in Mus. Berlin.

1058 *b*. **Delphyre boliviana.** (Plate XVI. fig. 27.)

Neacerea minuta, subsp. 1, Hmpsn. Cat. Lep. Phal. B.M. i. p. 479.
Eucereon melanoperas, bolivianum, Roths. Nov. Zool. xix. p. 173 (1912).

Hab. Bolivia, Sargo (*Garlepp*), 1 ♂, Yungas de Coroico (*Garlepp*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

1058 *c*. **Delphyre pyrozona.** (Plate XVI. fig. 28.)

Neacerea pyrozona, Druce, A. M. N. H. (7) xv. p. 463 (1905).
Heliura rubrocincta, Roths. Nov. Zool. xix. p. 167 (1912).

♂. Head and thorax dark brown streaked with greyish ochreous; back of head with slight crimson marks; abdomen scarlet, the 1st two segments and the dorsum of third black-brown, the following segments with dorsal spots, the two terminal segments black-brown, the ventral surface pinkish white, the terminal segments brown. Fore wing dark brown, the veins greyish; a grey mark at base and some diffused grey on antemedial area with an elongate

whitish mark below middle of cell; a round blackish spot in middle of cell with small triangular whitish mark beyond it; two whitish spots beyond the cell and two nearer termen between veins 5 and 2; an irregularly sinuous greyish subterminal line. Hind wing with the basal half hyaline, the veins and terminal half black-brown.

Hab. Venezuela, Caura Valley (*Klages*), 10 ♂, La Union (*Klages*), type † ♂ *rubricincta* in Coll. Rothschild. *Exp.* 30–34 millim.

*1059 *a*. **Delphyre arpi.** (Plate XVI. fig. 29.)

Phægoptera arpi, Schaus, P. Z. S. 1894, p. 231.

♀. Head yellowish; palpi except at base, the lower part of frons, and a spot on vertex fuscous brown; antennæ black with series of small white spots on inner side, the extremity white; thorax yellowish with large fuscous brown patch in front and on dorsum; pectus and legs yellowish and fuscous; abdomen pale yellow, the base blackish with subdorsal yellow spots, segmental black lines expanding into dorsal spots, the last two segments black with the extremity white. Fore wing yellowish white; a fuscous patch at base of inner margin and slight marks towards costa; the antemedial line strongly angled inwards in cell and on vein 1, excurved between those points and with an oblique striga before it; a round spot in middle of cell with a line from it strongly excurved in submedian interspace and connected with the antemedial line by a streak above inner margin; two spots in end of cell and a series beyond it from costa to vein 2; the postmedial line strongly excurved beyond the cell and incurved below vein 3, with dentate marks beyond it towards costa and from vein 3 to inner margin; a series of spots just before termen. Hind wing dark fuscous with semihyaline patch in and beyond end of cell.

Hab. Brazil, Rio Janeiro, type † ♀ in U.S. Nat. Mus. *Exp.* 46 millim.

*1060 *a*. **Delphyre parcipuncta**, n. n. (Plate XVI. fig. 30.)

Heliura stolli, meridionalis, Roths. Nov. Zool. xix. p. 170 (1912), nec p. 167.

♂. Head black, the vertex grey with crimson spots behind, the antennæ with the shaft white above towards base; thorax grey, the tegulæ with blue-black dorsal patches, the patagia with blue-black patches towards base; pectus and legs black, the coxæ and femora towards base crimson; abdomen black-brown with minute yellow dorsal spot at base and the anal tuft white at tip, the ventral surface crimson except at extremity. Fore wing grey-white; subbasal black spots below costa and cell and an elongate mark below vein 1; an elongate antemedial mark on costa, round spot in cell, and spots above and below vein 1; an elongate mark on costa

above end of cell, bar in end of cell, spots beyond the cell and above base of vein 6, and a double series of spots between lower angle of cell and terminal part of inner margin; a postmedial series of spots from costa to vein 5, and a series before termen from apex to vein 3; cilia black-brown to vein 3. Hind wing black-brown with some whitish in and just below the cell. Underside of fore wing black-brown with white spot in cell towards extremity, elongate mark below the cell, postmedial spots above and below vein 6, and subterminal spots above and below vein 4.

Hab. Brazil, Amazons, R. Madeira, Allianca (*Hoffmanns*), type † ♂ in Coll. Rothschild. *Exp.* 36 millim.

*1060 *b*. **Delphyre pieroides.** (Plate XVI. fig. 31.)

Heliura pieroides, Roths. Nov. Zool. xix. p. 169 (1912).

♀. Head and thorax grey, the latter with some yellow behind; palpi, frons, and antennæ black, the last with the shaft white above towards base; tegulæ with blackish dorsal patches, the patagia edged with blackish towards base, the pro- and metathorax with some blackish; pectus and legs black-brown, the coxæ yellow, the fore and mid femora white in front, the mid tibiæ with some white at base; abdomen black-brown with small dorsal white spots on two basal segments and the anal tuft white at tip, the ventral surface yellow except at extremity. Fore wing white slightly tinged with brown; subbasal black spots below costa, in submedian interspace, and above inner margin; an elongate antemedial mark below costa, round spot in cell, and spots above and below vein 1; an elongate mark on costa above end of cell, bar in end of cell expanding below, patch beyond the cell and spot above base of vein 6, spots above veins 4 and 3 and two above vein 2, and spots in submedian fold and above inner margin; a postmedial maculate band from costa to vein 5, and a sinuous series of spots before termen, the spots below veins 7 and 4 extending to termen; cilia black-brown to vein 3. Hind wing dark brown, the cell and area just below it whitish. Underside of fore wing black-brown, a white spot in cell towards extremity, elongate mark below the cell, postmedial spots above and below vein 6, and spots nearer termen above and below vein 4.

Hab. Brazil, Amazons, Fonte Boa (*Klages*), type † ♀ in Coll. Rothschild. *Exp.* 36 millim.

*1060 *c*. **Delphyre distincta.** (Plate XVI. fig. 32.)

Heliura distincta, Roths. Nov. Zool. xix. p. 166 (1912).

♂. Head and thorax dark red-brown, the back of head with pair of yellow spots, the frons above, edges of tegulæ, patagia and dorsum of thorax with greyish marks; coxæ yellow, the femora streaked with white; abdomen black-brown, the ventral surface grey-brown. Fore wing dark red-brown; some greyish at base and the

veins streaked with greyish; a round dark spot in middle of cell, with some greyish before it in the cell and below costa, defined on outer side by a whitish bar with a double irregularly sinuous band from it to inner margin; a postmedial whitish band from costa to vein 3, excurved below vein 5; a dentate grey subterminal line connected with a grey terminal line. Hind wing black-brown with a large semihyaline white patch from below middle of cell to vein 1. Underside of fore wing black-brown with the medial and postmedial bands white.

Hab. Brazil, Amazons, R. Madeira, Allianca (*Hoffmanns*), type † ♂ in Coll. Rothschild. *Exp.* 38 millim.

*1060 *d*. **Delphyre lemoulti.** (Plate XVII. fig. 1.)

Heliura lemoulti, Roths. Nov. Zool. xix. p. 168 (1912).

♀. Head, thorax, and abdomen dark red-brown; the back of head with pair of crimson spots; throat and coxæ with crimson patches; abdomen suffused with metallic blue at sides. Fore wing dark red-brown; a small semihyaline spot in upper part of cell towards extremity and small postmedial spots above and below vein 6. Hind wing hyaline, the veins and margins black-brown, the terminal band expanding widely on apical area and below vein 2.

Hab. Fr. Guiana, St. Laurent Maroni (*Le Moult*), type † ♀ in Coll. Rothschild. *Exp.* 42 millim.

1061. **Delphyre albiventus**, insert (syn.) :—

Agyrta birchi, Roths. Nov. Zool. xix. p. 164 (1912).

Brazil, Minas Geraes, San Jacinthe Valley (*Birch*), type † ♂ in Coll. Rothschild.

*1061 *a*. **Delphyre borealis.** (Plate XVII. fig. 2.)

Agyrta birchi, borealis, Roths. Nov. Zool. xix. p. 165 (1912).

♂. Head, thorax, and abdomen black-brown glossed with blue; palpi at base and in front, frons, basal joint of antennæ in front, and gulæ white; the vertex of head and dorsum of thorax with slight white streak, the patagia with white streaks; shoulders and pectus with white spots; coxæ white; the extremities of fore tibiæ and mid and hind femora white; ventral surface of abdomen white. Fore wing black-brown; a white streak on basal half of vein 1; an oblique semihyaline white band from subcostal nervure before end of cell to vein 2, somewhat pointed below. Hind wing black-brown, the inner area white except the inner margin and termen; the underside with the basal costal area and a small spot at apex white.

Hab. Venezuela, Caura R., Corosito (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 28 millim.

*1061 *b*. **Delphyre pumila**. (Plate XVII. fig. 3.)

Agyrta birchi, pumila, Roths. Nov. Zool. xix. p. 165 (1912).

♂. Head, thorax, and abdomen black-brown glossed with blue; palpi at base and in front, frons, basal joint of antennæ in front, and gulæ white; patagia with white streaks; shoulders and pectus with white spots; coxæ white; fore legs white in front, the mid and hind tibiæ at extremities and the hind femora at extremities and tibiæ at base white; ventral surface of abdomen white. Fore wing black-brown; some whitish irroration on vein 1 before middle; an oblique semihyaline white band from subcostal nervure before end of cell to vein 2, rounded below. Hind wing black-brown, the inner area white except the termen, on underside extending to the termen and cilia.

Hab. Brazil, Amazons, R. Madeira, Allianca (*Hoffmanns*), type † ♂ in Coll. Rothschild, Calama. *Exp.* 24 millim.

*1061 *c*. **Delphyre bœttgeri**. (Plate XVII. fig. 4.)

Napata bœttgeri, Druce, A. M. N. H. (8) iii, p. 457 (1909).

♂. Head and thorax black-brown, the back of head and neck above crimson; palpi with the 2nd joint white in front; frons at sides and basal joint of antennæ in front with white spots; legs streaked with white; abdomen black suffused with metallic blue, the ventral surface white. Fore wing black-brown with quadrate hyaline spot in end of cell, spots beyond the cell above and below vein 4, and round white apical spot. Hind wing black-brown with triangular hyaline patch in lower part of cell and on the area below it.

Hab. Peru, Huancabamba (*Bœttger*), type † ♂ in Coll. Joicey. *Exp.* 38 millim.

1061 *d*. **Delphyre tetilla**. (Plate XVII. fig. 5.)

Neacerea tetilla, Dogn. Ann. Soc. Ent. Belg. xlii. p. 344 (1898).
Neacerea elegans, Lathy, Entom. xxxii. p. 119 (1899).
Heliura bimaculata, Roths. Nov. Zool. xix. p. 167 (1912).

♂. Head and thorax black; neck with crimson ring; palpi in front, sides of frons, basal joint of antennæ in front, coxæ, and stripes on femora white; abdomen black shot with brilliant metallic blue, the ventral surface white. Fore wing black; a quadrate hyaline spot in end of cell and a bifid spot beyond the cell above and below vein 4. Hind wing black with a hyaline patch below the cell extending just into end of cell and beyond lower angle and almost to inner margin.

Hab. Colombia, Bogotá, type † ♂ *bimaculata* in Coll. Rothschild; Ecuador, C. de Labomefon, type † ♂ in Coll. Dognin, Banos, 1 ♂ type *elegans*, *Exp.* 34–36 millim.

*1061 *e*. **Delphyre aclytioides.** (Plate XVII. fig. 6.)

Delphyre aclytioides, Hmpsn. A. M. N. H. (7) viii. p. 174 (1901).

♀. Black-brown; palpi yellow at base; frons with yellow band above it; fore coxæ yellow at sides; abdomen with metallic blue bands on terminal segments, the ventral surface with yellow bands. Fore wing with the veins pale-streaked; a postmedial orange spot on costa with an oblique yellowish band from it to termen above tornus.

Hab. Fr. Guiana, Cayenne, type † ♀ in Mus. Oxon. *Exp.* 36 millim.

*1061 *f*. **Delphyre varians.** (Plate XVII. fig. 7.)

Delphyre varians, Hmpsn. A. M. N. H. (7) viii. p. 174 (1901).

♀. Black-brown; abdomen with the terminal segments silvery blue and lateral and sublateral series of spots. Fore wing with oblique postmedial orange band from just below costa to vein 3, attenuate below. Hind wing semihyaline at base.

Ab. 1. Fore wing with the band reduced to a small spot at upper angle of cell.

Hab. Brazil, Amazons, type † ♀ in Mus. Oxon. *Exp.* 40 millim.

*1061 *g*. **Delphyre subapicalis.** (Plate XVII. fig. 8.)

Delphyre subapicalis, D. Jones, Trans. Ent. Soc. 1908, p. 145.

♂. Head, thorax, and abdomen black-brown, the last faintly tinged with blue; palpi with the 1st joint orange; vertex of head orange with a few black scales; tegulæ edged with orange; shoulders with orange spots; coxæ with orange patches; abdomen with the ventral surface white. Fore wing black-brown with fine pale streaks on the veins and in cell and submedian fold; an oblique elliptical white postmedial patch from below costa to below vein 4. Hind wing black-brown with semihyaline white patch in lower part of cell, below the cell and above base of vein 2; the underside with the white patch extending to nearer termen and filling the lower half of cell.

Hab. Brazil, Castro Paraña, type † ♂ in Coll. D. Jones. *Exp.* 40 millim.

1062 *a*. **Delphyre pyroperas.** (Plate XVII. fig. 9.)

Delphyre pyroperas, Hmpsn. A. M. N. H. (8) viii. p. 396 (1911).

Head and thorax pale red-brown, the back of head and shoulders with paired crimson spots; palpi at base and coxæ pale crimson;

abdomen black-brown, the four terminal segments crimson with slight dark segmental lines and the anal tuft blackish, the ventral surface crimson. Fore wing pale red-brown, the veins, discal and submedian fold slightly darker; a faint diffused discoidal patch; the apical area with faint diffused patch. Hind wing black-brown with hyaline streaks in, below, and just beyond the cell and on basal inner area.

Hab. Brazil, Rio Grande do Sul, 1 ♀; Paraguay, Sapucay (*Foster*), 1 ♂ type. *Exp.* 42 millim.

1062 *b*. **Delphyre hampsoni.** (Plate XVII. fig. 10.)

Delphire rufiventris, hampsoni, Roths. Nov. Zool. xix. p. 165 (1912).
Delphire rufiventris, orientalis, Roths. Nov. Zool. xix. p. 165 (1912).
Delphire rufiventris meridensis, Roths. Nov. Zool. xix. p. 165 (1912).

Head and thorax grey-brown, the back of head and sides of tegulæ with paired crimson spots; palpi at base and coxæ crimson; abdomen black-brown, the base grey-brown; the 4th, 5th, and 6th segments with crimson segmental lines, the ventral surface crimson except the anal tuft. Fore wing grey-brown, the cell towards extremity and area below it and the interspaces beyond the cell between veins 7 and 2 thinly scaled and somewhat semihyaline leaving a rounded darker discoidal patch. Hind wing dark-brown, the cell, a fascia below it, and the interspaces just beyond it hyaline. Underside of fore wing with the thinly scaled areas paler and more prominent.

Hab. Colombia, Jiminez, 1 ♂, 1 ♀; Venezuela, Merida (*Briceno*), type † ♂, ♀ *meridensis* in Coll. Rothschild; Brazil, R. Madeira, Allianca (*Haffmanns*), type † ♂ *orientalis* in Coll. Rothschild; Peru, Carabaya, San Domingo (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 40–44 millim.

1063 *a*. **Delphyre discalis.** (Plate XVII. fig. 11.)

Neacerea discalis, Druce, A. M. N. H. (7) xv. p. 463 (1905).
Delphire infra-alba, Roths. Nov. Zool. xix. p. 166 (1912).

♂. Head and thorax greyish black; back of head with two crimson spots; coxæ whitish; abdomen black, the base greyish, the ventral surface white except anal segment. Fore wing greyish black with more or less prominent semihyaline streaks in end of cell, below the cell, and above base of vein 2, and series of short streaks beyond the cell between veins 7 and 3. Hind wing black with hyaline streaks in lower part of cell, below the cell, and beyond the cell above bases of veins 2 and 3.

Hab. Venezuela, Caura Valley (*Klages*), 3 ♂, La Union (*Klages*), type † ♂, ♀ *infra-alba* in Coll. Rothschild.. *Exp.* 36 millim.

*1064 *a*. **Delphyre flaviventralis.** (Plate XVII. fig. 12.)

Delphyre flaviventralis, Hmpsn. A. M. N. H. (7) viii. p. 174 (1901).

♀. Fuscous brown; palpi with the 1st joint orange; back of head with two orange spots; abdomen with orange ventral stripe not reaching extremity. Fore wing with oblique whitish band across end of cell from subcostal nervure to submedian fold; an oblique postmedial band from vein 7 to 3. Hind wing black with hyaline patch in, below, and beyond the cell.

Hab. Venezuela, type † ♀ in Mus. Oxon. *Exp.* 34 millim.

1064 *b*. **Delphyre flaviceps.** (Plate XVII. fig. 13.)

Neacerea flaviceps, Druce, A. M. N. H. (7) xv. p. 463 (1905).
Delphire klagesi, Roths. Nov. Zool. xix. p. 165 (1912).

♂. Head and thorax dark grey with bluish black streaks; vertex of head, base of palpi, and front of pectus orange-yellow; abdomen blue-black, greyish at base, the ventral surface orange-yellow except at base and extremity. Fore wing greyish fuscous, the veins black; an ill-defined whitish streak below middle of cell; an oblique postmedial white band from vein 7 to 3 near termen, the veins crossing it dark. Hind wing black, the lower part of cell and area below and beyond it hyaline; a slight hyaline streak at base of inner area.

Hab. Venezuela, Caura Valley (*Klages*), 4 ♂; La Union (*Klages*), type † ♂ *klagesi* in Coll. Rothschild. *Exp.* 42 millim.

1065. **Delphyre testacea**, insert (syn.):—

Delphyre monotona, Dyar, Pr. U.S. Nat. Mus. xxxviii. p. 231 (1910).

*1065 *a*. **Delphyre nigra.** (Plate XVII. fig. 14.)

Neacerea nigra, Schaus, Trans. Am. Ent. Soc. xxx. p. 136 (1904).

♂. Head, thorax, and abdomen black-brown, the back of head and base of patagia with blue spots; abdomen with lateral orange bands except on basal segments, dorsally complete on terminal segment. Fore wing uniform fuscous brown. Hind wing fuscous brown, the lower part of cell and area just below it hyaline.

Hab. Panama, Chiriqui, type †♂ in U.S. Nat. Mus. *Exp.* 42 millim.

Genus **MESOCEREA**, nov.

Type, *M. apicalis*.

Proboscis fully developed; palpi upturned, the 2nd joint reaching to vertex of head, the 3rd short; antennæ of male bipectinate with short branches dilated at extremities, the apical part serrate; tibiæ with the spurs short;

abdomen smoothly scaled. Fore wing rather narrow, the apex rounded, the termen obliquely curved; vein 3 from angle of cell; 4, 5 stalked; 6 from upper angle; 7, 8, 9, 10 stalked; 11 from cell. Hind wing with the cell about two-thirds length of wing; vein 3 from angle; 4 absent; 5 from well above angle; 6, 7 from upper angle; the terminal area on underside of male clothed with rough scales.

In key differs from *Antichloris* in the fore wing having veins 4, 5 stalked.

*1065 *b*. Mesocerea distincta.

Teucer distincta, Roths. Nov. Zool. xviii. p. 43 (1911), & xix. p. 375, pl. iii. f. 2.

♂. Head, thorax, and abdomen black-brown faintly tinged with blue; the back of head with two small scarlet spots; tegulæ with yellow line at base; metathorax edged with yellowish behind; fore coxæ pale crimson; abdomen with the extremity and ventral surface crimson. Fore wing black-brown; a small yellowish spot at base; a wedge-shaped hyaline patch in end of cell, elongate patch below the cell, and postmedial spots above and below vein 6; a few yellowish scales on discocellulars and slight antemedial and medial marks above vein 1; subterminal line very indistinct, yellowish, excurved below vein 7 and at middle; a small white apical patch. Hind wing hyaline; the veins black; the costal and terminal areas rather broadly black-brown, the termen greyish except towards apex; the underside with the termen broadly greyish.

Hab. Surinam, Marœwym Valley, Arœwarwa Creek (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

*1065 *c*. Mesocerea apicalis.

Teucer apicalis, Roths. Nov. Zool. xviii. p. 42 (1911), & xix. p, 375, pl. iii. f. 1.

♂. Head, thorax, and abdomen black-brown, the vertex of head orange-yellow; palpi in front and lower part of frons greyish; fore coxæ yellow; pectus, legs, and ventral surface of abdomen greyish brown. Fore wing black-brown; a wedge-shaped whitish mark in

Fig. 45.—*Mesocerea apicalis*, ♂. ½.

middle of cell and elongate mark below the cell; a quadrate whitish mark beyond the cell; the terminal area greyish, with black-brown streaks above and below vein 6 beyond the whitish mark and streaks in the interspaces towards termen. Hind wing semihyaline white, the veins blackish, the terminal area broadly black-brown;

the underside with the costal area black-brown, the rough scales of terminal area greyish.

Hab. SURINAM, Marœwym Valley, Arœwarwar Creek (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

*1067 *a*. **Heliura assimilis.** (Plate XVII. fig. 15.)

Heliura assimilis, Roths. Nov. Zool. xix. p. 166 (1912).

♂. Head and thorax dark red-brown, the back of head with pair of yellow spots, the dorsum of thorax and patagia with some grey; the coxæ and streaks on femora and tibiæ white; abdomen crimson with the two basal segments and anal tuft dark brown, the ventral surface with the basal half white, the terminal half banded brown and white. Fore wing dark red-brown; a hyaline spot in middle of cell and spot below the cell with pale sinuous band from its outer edge to inner margin; a postmedial series of hyaline spots from costa to vein 3, excurved below vein 5; a faint greyish subterminal line, excurved below costa and incurved in submedian interspace. Hind wing dark brown, the cell and a large patch below it hyaline with some brown scales; the underside with the inner area white.

Hab. PERU, Carabaya, San Domingo (*Ockenden*), type † ♂ in Coll. Rothschild, Goyaz. *Exp.* 32 millim.

1068. **Heliura hecale**, insert (syn.) :—

Hyaleucerea picticeps, Hmpsn. A. M. N. H. (7) xi. p. 341 (1903).

The type was from Petropolis not Peru; the species belongs to Section 11.

*1068 *a*. **Heliura gigantea.**

Eucereon giganteum, Druce, A. M. N. H. (7) vi. p. 65 (1900).

♂. Both wings with the terminal area clothed with rough scales on underside; hind wing with the tornus not lobed.

Black-brown; vertex of head crimson; tegulæ, patagia, and thorax streaked with olive-yellow; metathorax with yellowish patch; pectus and legs with some olive-yellow, the coxæ crimson, the fore coxæ on inner side only; abdomen with crimson bands on 3rd and 4th segments, the 5th, 6th, and 7th segments and extremity crimson, the ventral surface with the extremity of 1st segment and the 2nd and 3rd crimson. Fore wing with antemedial olive line angled outwards below costa and in submedian fold, inwards on median nervure and ending at vein 1, leaving a round spot in cell between it and the medial line, which arises at subcostal nervure, is whitish in and below the cell where it is conjoined to the antemedial line, then olive and angled outwards on vein 1; the veins olive; a postmedial line incurved to costa, whitish between veins 7 and 5, then excurved to vein 2, a detached portion before

it from vein 3 angled inwards on vein 2 and outwards on vein 1. Hind wing with the basal half white except costal area, the veins

Fig. 46.—*Heliura gigantea*, ♂. ½.

black. Underside of fore wing with white spots in and below middle of cell and beyond the cell on each side of vein 6.

Hab. Colombia (*Pratt*), type † ♂ in Coll. Joicey. *Exp.* 54 millim.

*1068 *b*. **Heliura flavopunctata.** (Plate XVII. fig. 16.)

Eucereon flavopunctatum, Dogn. Hét. Nouv. Am. Sud, ii. p. 12 (1911).

♂. Head and thorax black-brown; yellow points at sides of frons above and on basal joint of antennæ in front, the back of head with orange patch; tegulæ orange at base, the patagia with yellowish fascia, the metathorax with yellowish patch; coxæ with yellow patches, the fore femora with yellowish streak; abdomen crimson, black-brown at base and extremity, the ventral surface grey-brown. Fore wing black-brown, an orange spot at base, the veins streaked with yellowish; a faint oblique yellowish antemedial line from costa to median nervure and very strongly excurved whitish line from cell to inner margin emitting a slight oblique streak to vein 1 towards base and a tooth to base of vein 2; a white bar in middle of cell; a yellow postmedial spot on costa with white band from it to vein 3, excurved below vein 5, and an oblique yellowish line between veins 3 and 2; subterminal line yellowish, curved, angled inwards in submedian fold; a yellowish terminal line; cilia yellow between veins 3 and 2. Hind wing semihyaline white; the veins blackish; the terminal area black-brown, very broadly at costa, then with diffused irregular inner edge.

Hab. Colombia, Cali, type † ♂ in Coll. Dognin. *Exp.* 36 millim.

1068 *c*. **Heliura baleris.** (Plate XVII. fig. 17.)

Eucereon baleris, Dyar, Pr. U.S. Nat. Mus. xxxviii. p. 232 (1910).

♂. Head and thorax fuscous brown, the back of head with two crimson spots, the tegulæ with blackish spots; palpi with some

yellow at base; basal joint of antennæ yellow in front; coxæ yellow tinged with crimson, the femora streaked with yellowish, the tibiæ at extremities and 1st joint of tarsi ringed with yellow; abdomen scarlet with large black-brown dorsal patch on basal segments followed by small spots, the anal segment black, the ventral surface yellow except towards extremity. Fore wing fuscous brown; an indistinct highly dentate greyish antemedial line; a round blackish spot in middle of cell defined by greyish; a blackish patch faintly defined by greyish at end of cell, extending to well below it; an indistinct interrupted greyish postmedial line, excurved below costa and at middle, below vein 3 bent inwards to below end of cell; a dentate greyish subterminal line with blackish streaks beyond it in the interspaces defined at extremities by greyish; cilia chequered greyish and fuscous. Hind wing semihyaline white, the veins and terminal area blackish, the latter expanding at apex and below vein 2.

Hab. Mexico, Vera Cruz, Santa Rosa (*Schaus*), 2 ♂ cotype. *Exp.* 40 millim.

1068 *d*. **Heliura phæosoma.** (Plate XVII. fig. 18.)

Heliura phæosoma, Druce, A. M. N. H. (7) xv. p. 464 (1905).

♂. Head, thorax, and abdomen black-brown, the back of head, shoulders, and a patch on metathorax crimson; coxæ and parts of femora white; abdomen with the base of ventral surface white followed by bands on the other segments. Fore wing black, the veins crimson; antemedial, medial, and postmedial crimson patches on costa and an antemedial patch above vein 1; a round black spot in middle of cell followed by a small triangular white spot; an elongate white mark below middle of cell; two white spots beyond the cell conjoined to two spots nearer termen between veins 5 and 3; an irregular crimson subterminal line and more or less crimson on termen. Hind wing black with hyaline patch in and below the cell and on inner area.

Hab. Venezuela, Caura Valley (*Klages*), 4 ♂. *Exp.* 30 millim.

1068 *e*. **Heliura suffusa.** (Plate XVII. fig. 19.)

Neacerea suffusa, Lathy, Entom. xxxii. p. 120 (1899).

♂. Black-brown; back of head with two crimson spots; coxæ crimson; abdomen with lateral series of metallic blue spots. Fore wing with semihyaline quadrate patch in end of cell and ill-defined streaks below middle of cell and above base of vein 2; semihyaline spots beyond the cell above and below vein 6. Hind wing hyaline, the veins and margins black; the terminal band expanding widely and rather irregularly on apical area and from vein 2 to tornus.

Hab. Br. Guiana, Demerara, 1 ♂ type. *Exp.* 38 millim.

1068 *f*. **Heliura fumata.** (Plate XVII. fig. 20.)

Heliura fumata, Roths. Nov. Zool. xix. p. 169 (1912).

Head and thorax dark chocolate-brown; the sides of frons and back of head with white points, the tegulæ at sides and shoulders with crimson spots; coxæ with white spots, the mid and hind femora white towards extremities; abdomen black-brown with sublateral series of white spots except towards extremities. Fore wing uniform dark chocolote-brown. Hind wing dark chocolate-brown with white streak below middle of cell and patch on basal half of inner area; a small white spot beyond lower angle of cell.

Hab. Ecuador, Pambilar (*Flemming & Miketta*), type † ♂ in Coll. Rothschild; Peru, Pozuzo, 1 ♀, Carabaya, R. Huacamayo, La Union. *Exp.* 36–38 millim.

*1068 *g*. **Heliura umbrimacula.** (Plate XVII. fig. 21.)

Heliura umbrimacula, Schaus, Pr. U.S. Nat. Mus. xxix. p. 191 (1905).

♂. Head and thorax fuscous tinged with olive-grey; back of head with two scarlet spots; metathorax with yellow patch; fore coxæ white in front; abdomen black-brown with the four basal segments ventrally white. Fore wing black-brown; the veins black; a small yellow spot at base; a broad whitish antemedial band tinged with olive-brown from below costa to inner margin, interrupted by the black veins; a similar narrower postmedial band from below costa to near termen at vein 3; a series of ill-defined olive spots from below costa near apex to termen at vein 4. Hind wing hyaline, the veins and a broad terminal band black tinged with blue.

Hab. Fr. Guiana, St. Jean Maroni, type† ♂ in U.S. Nat. Mus. *Exp.* 34 millim.

*1068 *h*. **Heliura fulvipicta.** (Plate XVII. fig. 22.)

Heliura fulvipicta, Kaye, Entom. xliv. p. 149 (1911).

♂. Head and thorax black-brown mixed with some grey; antennæ with the shaft white above towards tips; back of head with two orange spots with some scarlet scales behind, the metathorax with one spot; fore coxæ with white patches, the mid and hind coxæ with white spots; abdomen black-brown shot with metallic blue, the ventral surface with white bands on three basal segments. Fore wing black-brown; a small orange spot at base; the antemedial area with broad band formed of brownish grey streaks in the interspaces; a series of brownish grey spots in the interspaces beyond the cell, bent outwards between veins 5 and 3 and inwards below vein 3; small brownish grey subterminal spots from below vein 8 to below 5 and from below vein 3 to tornus. Hind wing semihyaline white, the veins black, the terminal area broadly black-brown.

Hab. Br. Guiana, Potaro R. (*Roberts*), type † ♂ in Coll. Kaye. *Exp.* 38 millim. Probably a variety of *H. umbrimacula*.

*1068 *i*. **Heliura elongata.** (Plate XVII. fig. 23.)

Heliura elongata, Roths. Nov. Zool. xix. p. 168 (1912).

♂. Head, thorax, and abdomen black-brown tinged with metallic blue; antennæ white at tips; the back of head with two yellow spots, the base of patagia and prothorax with grey marks, the metathorax with yellow spot; coxæ with white spots, the ventral surface of abdomen with white bands on basal half, the anal tuft white at tip. Fore wing dark reddish brown; a yellow spot at base of costa; a broad antemedial greyish band formed by patches in the interspaces; a greyish mark below end of cell; a postmedial series of rather elongate greyish spots in the interspaces, excurved below vein 5 and ending at tornus; slight subterminal greyish marks between veins 8 and 5. Hind wing black-brown, the cell and basal half of submedian interspace and inner area hyaline.

Ab. 1. The whole back of head orange, the tegulæ greyer; abdomen with orange intersegmental lateral bar behind segment 4 visible on one side only.

Hab. Venezuela, Caura R., La Vuelta (*Klages*), type † ♂ in Coll. Rothschild, Maripa. *Exp.* 36 millim.

1069 *a*. **Heliura zonata.** (Plate XVII. fig. 24.)

Heliura zonata, Druce, A. M. N. H. (7) xv. p. 464 (1905).

♂. Head blackish, the back of head yellow, a crimson ring round neck; thorax grey, the patagia edged with black, a yellow patch on metathorax; legs whitish and black; abdomen crimson, the anal segment black, a lateral black stripe. Fore wing white, the veins and streak in submedian fold brown, the medial part of inner area tinged with ochreous; a diffused oblique blackish subbasal band; an indistinct curved antemedial line; a small spot in middle of cell with mark on costa above it; a large lunulate discoidal patch from costa to vein 1 with a slight oblique line from it to inner margin and large patch connecting it with tornus; apical area fuscous with small grey spots on it, its inner edge angled outwards at vein 5. Hind wing semihyaline white, the veins dark, the termen fuscous expanding into large patches at apex and tornus.

Hab. Venezuela, Caura Valley (*Klages*), 10 ♂. *Exp.* 30–32 millim.

1069 *b*. **Heliura balia**, Hmpsn., trans. from *Eucereon*, no. 1086.

1069 *c*. **Heliura baliodes**, n. sp. (Plate XVII. fig. 25.)

♀. Head and thorax black, the vertex of head brownish white with black spot, the tegulæ brownish white except at tips with

some crimson at base, the patagia edged with brownish white; coxæ crimson; abdomen crimson, the extremity and ventral surface black. Fore wing brownish white; the costal edge black; subbasal black spots on costa and below the cell and a patch at base of inner margin, antemedial spots on costa and in cell and minute spots above and below submedian fold; three spots between origin of vein 2 and inner margin; a bar in end of cell with spot above it on costa and spots beyond it above and below vein 6 and elongate spots below veins 5, 4, 3; four postmedial spots between costa and vein 5 and an incurved series of three spots between vein 3 and inner margin; a series of rather irregular spots just before termen, the spot below vein 3 minute. Hind wing fuscous black, the cell and area just below it semihyaline.

Hab. Fr. Guiana, St. Laurent Maroni, 1 ♀ type. *Exp.* 30 millim.

*1069 *d*. Heliura cennedyi. (Plate XVII. fig. 26.)

Eucereon kennedyi, Roths. Nov. Zool. xix. p. 171 (1912).

♀. Head and thorax fuscous black mixed with some grey, the back of head with two crimson spots; antennæ black, white at tips; coxæ and base of femora pale crimson; abdomen black-brown, the three terminal segments crimson with the anal tuft blackish at tip, the ventral surface pale crimson except at extremity. Fore wing grey-white tinged with pink; subbasal black spots below costa and cell; an antemedial series of four black spots, bent inwards to inner margin; a small round spot in middle of cell and three spots between origin of vein 2 and inner margin; a black mark on costa above end of cell, two spots in end of cell, spots beyond the cell and above veins 6, 4, 3, two spots above vein 2, a spot in submedian interspace, and elongate mark above inner margin; a postmedial series of spots from costa to vein 5, and a series of spots in the interspaces of terminal area. Hind wing semihyaline whitish suffused with fuscous especially towards termen, the apical area fuscous black extending almost to the cell. Underside of fore wing fuscous, a whitish patch in cell towards extremity, and postmedial spots above and below vein 6 conjoined to spots nearer the termen above and below vein 4.

Hab. Brazil, Minas Geraes (*Kennedy*), type † ♀ in Coll. Rothschild. *Exp.* 32 millim.

*1069 *e*. Heliura thysbodes. (Plate XVII. fig. 27.)

Heliura thysbodes, Dogn. Hét. Nouv. Am. Sud, vii. p. 9 (1914).

♂. Head and thorax ochreous white mixed with brown, the tegulæ at tips and patagia near base with brown spots; antennæ and palpi brown; pectus and legs brown, the coxæ, femora, and streaks on base of mid tibiæ ochreous white; abdomen with the

three basal segments grey-brown, the extremity of 3rd segment and four terminal segments yellow with black dorsal bars on two terminal segments, the ventral surface yellow with the extremity brown. Fore wing whitish with the costa and veins yellowish; subbasal line yellowish with dark brown spot before it at costa and band from cell to inner margin, angled outwards at vein 1, round spot in cell and small spots above and below vein 1; an elliptical dark brown patch at end of cell from costa to vein 2, broken up by the yellow veins; a postmedial maculate dark brown band, bent inwards below vein 5 and again below vein 2; a series of spots just before termen. Hind wing brown with some whitish in end of cell; the underside with the basal half whitish except the inner area.

Hab. Colombia, Muzo (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 40 millim.

*1069*f.* **Heliura occendeni.** (Plate XVII. fig. 28.)

Heliura ockendeni, Roths. Nov. Zool. xix. p. 169 (1912).

♂. Head black, the vertex whitish with some yellow behind, the shaft of antennæ whitish towards base; thorax whitish, the tegulæ with bluish black dorsal patches, the patagia edged with bluish black, the dorsum with blackish streak; pectus and legs black-brown, the coxæ ochreous white; abdomen black-brown, the terminal half yellow with black band before the anal tuft, the ventral surface yellow except at extremity. Fore wing whitish; the base black with a white spot and emitting short streaks on costa, below the cell, in submedian fold, and below vein 1; an antemedial blackish mark on costa, small round spot in cell, small spot above vein 1 and oblique bar below it; an elongate mark on costa above end of cell, bar in end of cell dilated below, bar beyond the cell and small spot above base of vein 6, spots above veins 4 and 3, two spots above vein 2, and patches in submedian fold and above inner margin; a postmedial series of spots from costa to vein 5, and sinuous series of spots before termen; cilia black-brown from apex to vein 3 and towards tornus. Hind wing whitish; the inner area suffused with brown; the terminal area black-brown expanding widely on apical area and below vein 2. Underside of fore wing with the costal area black-brown, a brown band at end of cell expanding beyond its lower angle and to termen below vein 3, the apical area black-brown, its inner edge angled inwards at vein 5; hind wing with the costal area black-brown.

Hab. Peru, Carabaya, R. Huacamayo (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 38 millim.

1069*g*. **Heliura marica**, Cram., trans. from *Eucereon*, no. 1076.

1069 *h*. **Heliura postcœrulea.** (Plate XVII. fig. 29.)

Eucereon postcœruleum, Roths. Nov. Zool. xix. p. 171 (1912).

♂. Head, thorax, and abdomen black, the back of head with conjoined crimson spots, the base of tegulæ, stripes on shoulders and patagia, and a small mark on metathorax grey; coxæ crimson, the fore femora streaked with white; abdomen with a slight bluish gloss, the ventral surface fuscous brown. Fore wing greenish blue, the costa and subcostal and median nervures streaked with black; the base of inner margin black emitting a short streak below vein 1 and an oblique streak above vein 1 towards an obliquely curved line from middle of submedian fold to middle of inner margin; a round black spot in middle of cell; a broad black band from costa above end of cell to terminal part of inner margin, its outer edge excurved at vein 5; a postmedial black patch from costa to vein 5, only separated by a faint curved greenish line from the black terminal area which is angled inwards at vein 5, narrows to a point at vein 3, then forms two diffused spots towards tornus. Hind wing greenish blue, the inner margin black; the apical area black, then the termen narrowly black to tornus; the underside with the costal area black.

Hab. Venezuela, Caura R., La Vuelta, Maripa; Br. Guiana, R. Demerara; Brazil, Amazons, Pará (*Bates*), 1 ♂, R. Madeira, Allianca (*Hoffmanns*), type † ♂ in Coll. Rothschild, Calama. *Exp.* 34 millim.

*1069 *i*. **Heliura amazonica.** (Plate XVII. fig. 30.)

Eucereon maricum, amazonicum, Roths. Nov. Zool. xix. p. 171 (1912).

♂. Head, thorax, and abdomen black-brown, the back of head with two conjoined yellow spots, the metathorax with yellow patch; tegulæ whitish at base, the shoulders with slight whitish marks, the patagia with whitish stripes; fore coxæ and the pectus ventrally yellowish white, the femora streaked with white; ventral surface of abdomen greyish brown. Fore wing white with a greenish blue tinge, the veins of basal half streaked with black; the costa black towards base with a yellow spot at base; a black streak from base of vein 1 to middle of submedian fold, then recurved to inner margin well before middle; the medial part of costa black; a round black spot in middle of cell; a black bar in end of cell, spots beyond the cell, above bases of veins 6, 4, 3, two spots above vein 2, two in submedian fold, and an elongate mark on terminal part of inner margin; a yellow mark on costa beyond middle, followed by a conical black patch from costa to vein 5, which is separated by a curved greenish line from confluent blackish patches on terminal area extending from apex to vein 3. Hind wing blue-white, the veins and inner margin black; the terminal area black, extending on apical area to the cell, then with diffused irregular inner edge.

Underside of fore wing blackish, a bluish white spot in cell towards extremity, a fascia below the cell, postmedial spots above and below vein 6 conjoined to spots nearer the termen above and below vein 4; hind wing with the costal area black.

Hab. Brazil, Amazons, Fonte Boa (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

*1069 *j*. **Heliura stolli.** (Plate XVII. fig. 31.)

Heliura stolli, Roths. Nov. Zool. xix. p. 170 (1912).

Head black, the vertex grey with crimson spots behind; tegulæ grey with dorsal black patches; thorax grey, the dorsum suffused with blackish, the patagia with black patches at base, the shoulders with yellow spots; pectus and legs black, the coxæ and fore and mid femora towards base crimson; abdomen black-brown, the ventral surface crimson except towards extremity. Fore wing grey-white; a V-shaped black mark below base of cell and spot above inner margin; an elongate black antemedial mark on costa, round spot in cell and spot above and below vein 1; an elongate mark on costa above end of cell, a bar in end of cell, spots beyond the cell and above base of vein 6 and double series of spots between lower angle of cell and terminal part of inner margin; a postmedial maculate band from costa to vein 5, separated by a sinuous line from a series of diffused marks in the interspaces of terminal area extending to vein 3. Hind wing dark brown, the inner area with a greyish tinge. Underside of fore wing black-brown with white spot in cell towards extremity, postmedial spots above and below vein 6, and spots nearer the termen above and below vein 4.

Hab. Brazil, Amazons, Fonte Boa (*Klages*), type † ♂, ♀ in Coll. Rothschild, Teffé. *Exp.* 36 millim.

*1071 *a*. **Heliura semihyalina.** (Plate XVII. fig. 32.)

Agyrta semihyalina, Roths. Nov. Zool. xix. p. 164 (1912).

♂. Head, thorax, and abdomen dark brown; palpi with the basal joint and 2nd joint in front white; frons and a bar on vertex of head white; tegulæ with dorsal white spots, the patagia streaked with white, the dorsum of thorax irrorated with white; pectus with some white; coxæ and streaks on femora white; abdomen with dorsal and sublateral white fasciæ and slight lateral streaks, the anal tuft white at base below. Fore wing dark brown; an elongate white patch below the cell and basal half of vein 2, pointed at extremities; an oblique white subapical band between veins 7 and 3. Hind wing dark brown, the cell and a fascia below it and beyond its lower extremity white; the hair on inner margin white; the underside with the inner margin white.

Hab. Brazil, Amazons, Fonte Boa (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

*1071 *b*. Heliura emerentia. (Plate XVIII. fig. 1.)

Heliura emerentia, Dognin, Ann. Soc. Ent. Belg. xlii. p. 344 (1898).

♂. Head and thorax black; head and tegulæ with patches of metallic blue; sides of frons, base of palpi, and coxæ white; abdomen brilliant metallic blue, with segmental black lines, the ventral surface white. Fore wing black with hyaline spot below middle of cell and patches beyond the cell above veins 6, 5, 4 and small spot below 4. Hind wing hyaline, the veins and margins black; the terminal band expanding widely on terminal area and from vein 2 to tornus, with irregular inner edge.

Hab. Ecuador, Loja, type † ♂ in Coll. Dognin. *Exp.* 30 millim.

*1071 *c*. Heliura viridicingulata. (Plate XVIII. fig. 2.)

Heliura viridicingulata, Roths. Nov. Zool. xix. p. 168 (1912).

♂. Head and thorax dark chocolate-brown, the frons at sides, back of head, and tegulæ at sides with white points; palpi with the 1st joint white at extremity; coxæ white; abdomen black-brown with lateral metallic green bands, the ventral surface white except at extremity. Fore wing very dark chocolate-brown; a small elongate semihyaline mark below middle of cell and elongate postmedial hyaline spots between veins 7 and 3. Hind wing hyaline, the veins and margins black-brown, the terminal band expanding at apex and from vein 2 to inner margin.

Hab. Peru, R. Toro, Le Merced (*Simons*), type † ♂ in Coll. Rothschild. *Exp.* 28 millim.

*1071 *d*. Heliura excavata.

Eucereon excavata, Dogn. Hét. Nouv. Am. Sud, i. p. 5 (1910).
Eucereon excavata, var. *flava*, Dogn. Hét. Nouv. Am. Sud, i. p. 6 (1910).

Hind wing of male with the termen strongly excised from below apex to vein 1 where it is produced to a point, the tornus

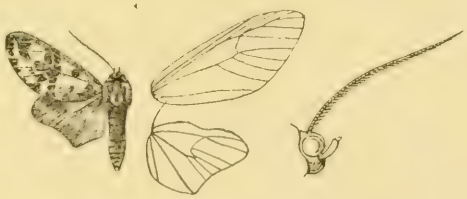

Fig. 47.—*Heliura excavata*, ♂. ½.

obliquely truncate, the costa lobed at base and excised at middle; vein 2 from close to lower angle of cell, 3, 4 from angle.

♂. Head, thorax, and abdomen black-brown; vertex of head white with two crimson spots behind, the basal joint of antennæ

white in front; tegulæ white at base and outer edge; patagia white at shoulders and base of upper edge and with white streak; thorax whitish behind; fore femora white towards base, the mid and hind coxæ and the femora towards base pink, the mid tibiæ with pink patch; abdomen crimson towards extremity, the anal segment white with a black band, the ventral surface pink except at extremity. Fore wing creamy white; a subbasal semicircular black mark on costa, rounded spot below the cell and wedge-shaped mark on inner margin; a black antemedial mark on costa, small round spot in cell, and spots above and below vein 1, the upper spot round, the lower oblique; an oblique black bar in end of cell conjoined to a spot on costa, a spot beyond the cell and point beyond upper angle; a postmedial series of spots in the interspaces, interrupted at vein 5, then strongly incurved to below end of cell; subterminal spots between veins 4 and 2 and a terminal series conjoined into a patch at apex. Hind wing whitish, the area below the cell tinged with fuscous; a large apical fuscous black patch extending to the cell and vein 4 and a patch between veins 2 and 1; the underside with the costal area black.

Ab. 1. *flava*. The crimson markings replaced by yellow.

Hab. Fr. Guiana (*Le Moult*), type † ♂ in Coll. Dognin. *Exp.* 36 millim.

*1071 *e*. **Heliura perexcavata.** (Plate XVIII. fig. 3.)

Eucereon perexcavatum, Roths. Nov. Zool. xix. p. 171 (1912).

♂. Head and thorax grey; palpi and frons black, the former yellow at tips; antennæ black, the shaft whitish above towards base; vertex of head with black spot, the back of head with two crimson spots; tegulæ with black patches, the patagia striped with black, the dorsum of thorax suffused with black; pectus and legs black, the coxæ and base of femora crimson; abdomen black with white dorsal bar before extremity and the extremity white. Fore wing brownish white; subbasal black spots on costa, below the cell and on inner margin; an antemedial black mark on costa, a round spot in middle of cell, and a series of three bars between origin of vein 2 and inner margin, angled inwards at vein 1; a black mark on costa above end of cell, a bar in end of cell, a spot beyond the cell and small spots above veins 6 and 4, two spots above veins 3 and 2 and three small spots between vein 2 and inner margin; a postmedial series of spots from costa to vein 5 separated by bluish white from the series of black spots in interspaces of terminal area. Hind wing fuscous black, the cell white; the cilia whitish at tips. Underside of fore wing black, a white patch in cell towards extremity, an elongate mark below the cell, postmedial spots above and below vein 6 conjoined to spots nearer the termen above and below vein 4.

♀. Abdomen without the white bar before extremity.

Hab. Brazil, Amazons, Fonte Boa (*Klages*), type † ♂, ♀ in Coll. Rothschild. *Exp.* 34 millim.

Genus APOCEREA.

Type.

Apocerea, Dyar, Pr. U.S. Nat. Mus. xxix. p. 174 (1905) ..... *sobria*.

Proboscis fully developed; palpi upturned to vertex of head; antennæ of male bipectinate; tibiæ with the spurs short; abdomen with some rough hair at base. Fore wing with vein 3 from before angle of cell; 4, 5 from angle; 6 from well below upper angle; 7, 8, 9, 10, 11 stalked. Hind wing with veins 3, 4, 5 from angle of cell; 6, 7 shortly stalked.

In key differs from *Callopepla* in the abdomen not having lateral tubercles at base; hind wing with veins 6, 7 shortly stalked.

*1071 *f*. Apocerea sobria.

Apocerea sobria, Schaus, Pr. U.S. Nat. Mus. xxix. p. 193 (1905.)

♂. Head and thorax grey-brown mixed with fuscous; back of head yellowish; abdomen black-brown with yellow subdorsal bands on three terminal segments and the anal tuft yellow. Fore wing dirty whitish tinged with fuscous especially on postmedial area; the veins with dark streaks; some blackish at base of costa, below cell, and on inner margin; antemedial line bent inwards and expanding to costa, then oblique, interrupted, slightly dentate;

Fig. 48.—*Apocerea sobria*, ♂. $\frac{1}{1}$.

a diffused medial line, oblique from costa to lower angle of cell, then inwardly oblique, angled inwards in submedian fold and outwards on vein 1; pale spots above bases of veins 6, 4, 3; postmedial line indistinct, waved, incurved between veins 6 and 4 and ending at tornus, with slight dark streak before it above vein 6; a subterminal series of short streaks between apex and vein 4. Hind wing fuscous brown, the costal area rather paler.

Hab. Fr. Guiana, St. Jean Maroni, type † ♂ in U.S. Nat. Mus. *Exp.* 30 millim.

*1073 *a*. Eucereon albitorna. (Plate XVIII. fig. 4.)

Eucereon albitorna, Dogn. Hét. Nouv. Am. Sud, v. p. 8 (1912).

♂. Head and tegulæ brown mixed with greyish ochreous; antennæ dark brown; thorax brown with grey streaks on patagia and a pair of stripes on dorsum; the extremities of tibiæ and the tarsi ringed with whitish; abdomen brown with the anal tuft yellow, the ventral surface whitish towards base. Fore wing whitish suffused in parts with brown, the veins brown, the costal

edge brown to beyond middle; a small antemedial brown spot on costa; a round brown spot in middle of cell; a brown discoidal lunule extending to costa and diffused beyond the cell; postmedial line brown, oblique, diffused and waved to below vein 4, then bent inwards to submedian fold below middle of cell, then oblique to inner margin; subterminal line brown, rather diffused and somewhat sinuous, bent outwards to near termen between veins 5 and 3, then strongly incurved; a brown bar from costa just before apex and spot on termen above tornus. Hind wing dark brown, the tornal area clothed with white androconia; the cilia white to just below apex; the underside with brown discoidal striga slightly defined on each side by greyish.

Hab. Colombia, Medina (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 22 millim.

1073 *b*. Eucereon metaloba.

Eucereon metaloba, Hmpsn. A. M. N. H. (8) iv. p. 348 (1909).

Hind wing of male with the tornal area strongly lobed but without fold and fringe of scales, the basal half of costa slightly lobed.

♂. Head and thorax fuscous brown mixed with grey; neck with yellow ring; palpi white at base; fore coxæ, the femora, and bands at extremity of fore tibiæ and the 1st joints of tarsi whitish; abdomen fuscous brown with yellow lateral spots at extremity, the

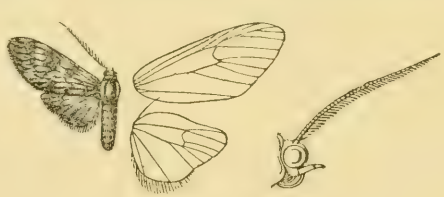

Fig. 49.—*Eucereon metaloba*, ♂. ½.

ventral surface white. Fore wing grey-white, the veins, discal, and submedian folds with brown streaks; an indistinct somewhat dentate antemedial line; a black medial line oblique to submedian fold, then angled inwards; a small black annulus in middle of cell; a diffused brown discoidal patch extending to costa, with a pale curved line on the discocellulars; a slight postmedial white streak on costa; postmedial line blackish, rather diffused and dentate to vein 5, then double and minutely crenulate, bent inwards below vein 3; some irregular dark subterminal marks from apex to vein 3 and above tornus. Hind wing semihyaline greyish suffused with fuscous, the costal area whitish except at apex; the underside grey with dark discoidal bar, the termen suffused with brown from apex to submedian fold.

Hab. Peru, La Oroya (*Ockenden*), 1 ♂ type. *Exp.* 30 millim.

1073 *c*. Eucereon phæophlebia.

Eucereon phæophlebia, Hmpsn. A. M. N. H. (7) xix. p. 226 (1907).

Hind wing of male with the inner area truncate towards tornus, a fold on underside containing a fringe of yellow hair.

♂. Head and thorax yellow-brown; palpi pink at base and fuscous at sides; coxæ pale pink; abdomen fuscous brown, the

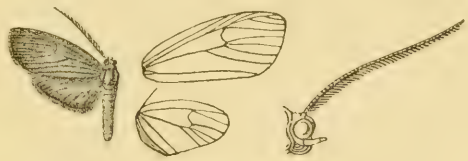

Fig. 50.—*Eucereon phæophlebia*, ♂. ½.

ventral surface pale pink except at extremity. Fore wing yellow-brown, the veins darker. Hind wing fuscous brown.

Hab. Argentina (*O. W. Thomas*), 1 ♂ type. *Exp.* 30 millim.

*1073 *d*. Eucereon sadana. (Plate XVIII. fig. 5.)

Eucereon sadana, Druce, A. M. N. H. (7) xviii. p. 81 (1906).

♂. Head and thorax dark reddish brown, neck with crimson ring; coxæ pale crimson; abdomen black-brown, the ventral surface pale crimson. Fore wing uniform dark reddish brown; cilia ochreous at tips. Hind wing black-brown, the interspaces bluish grey to beyond middle; cilia ochreous at tips; the underside with the fringe of hair at tornus pale ochreous.

Hab. Peru, Quinton (*Ockenden*), type † in Coll. Joicey. *Exp.* 30 millim.

1074. Rename **Eucereon metoidesis**, Hmpsn. A. M. N. H. (7) xv. p. 430 (1905), and del. *E. cinctum*, Schaus.

*1075 *a*. Eucereon cœruleocephala. (Plate XVIII. fig. 6.)

Heliura cœruleocephala, Roths. Nov. Zool. xix. p. 168 (1912).

♂. Head and thorax dark reddish brown, frons brilliant metallic blue with white points at sides; tegulæ at sides and shoulders with crimson spots, the tegulæ and thorax with dorsal white and metallic blue fascia; fore coxæ with white spots; abdomen very dark reddish brown, the sides and four terminal segments suffused with brilliant metallic blue, the ventral surface with white bands except at extremity. Fore wing dark red-brown, the veins and submedian fold with dark streaks. Hind wing dark red-brown, the lower part of cell, a fascia below it, and basal half of inner area semihyaline.

Hab. Peru, Carabaya, San Domingo (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 40 millim.

*1077 *a*. Eucereon rufipes. (Plate XVIII. fig. 7.)

Heliura rufipes, Roths. Nov. Zool. xix. p. 170 (1912).

♀. Head and thorax grey-brown; palpi black, white in front; frons white with black mark above; antennæ black, the vertex of head with black spot and two crimson spots behind; tegulæ and patagia black, the latter edged with black and yellowish white above, the pro- and metathorax with black spots; pectus dark brown; legs crimson with dark brown streaks on femora, tibiæ, and base of tarsi; abdomen crimson with dorsal and lateral black bands, the ventral surface whitish towards base and dark brown at extremity. Fore wing white tinged with reddish brown; subbasal black-brown spots on costa, and below the cell with another spot beyond it, and an elongate mark on inner margin, all defined by white; antemedial spots on costa, in cell, and above and below vein 1, defined by white; an elongate mark on costa above end of cell, two spots in end of cell, spots beyond the cell and above base of vein 6, spots above veins 4 and 3, and two above 2, two elongate marks in submedian interspace and a more elongate mark above inner margin; a postmedial maculate band from costa to below vein 5, and a series of spots before termen; cilia black-brown to vein 3 and towards tornus. Hind wing black-brown with some semihyaline whitish in and just below the cell. Underside of fore wing black-brown with white bar in cell towards extremity, elongate mark below the cell, postmedial spots above and below vein 6, and spots nearer termen above and below vein 4.

Hab. Peru, Carabaya, San Domingo (*Ockenden*), type † ♀ in Coll. Rothschild. *Exp.* 42 millim.

*1078 *a*. Eucereon rosenbergi. (Plate XVIII. fig. 8.)

Eucereon rosenbergi, Roths. Nov. Zool. xix. p. 173 (1912).

Head and thorax very dark reddish brown, the back of head with two pale crimson spots, the patagia and dorsum of thorax with paired greyish streaks; pectus with whitish streaks below the wings; abdomen crimson with a dorsal dark brown patch on basal segments, the ventral surface dark brown with sublateral whitish stripes on basal half. Fore wing very dark red-brown, the veins streaked with ochreous; a curved white antemedial line from costa to vein 1; an oblique white line from vein 2 near its origin to inner margin before middle; a slight whitish spot in upper part of cell towards extremity; a postmedial white patch from costa to vein 5, its outer edge angled outwards above vein 6; a pale dentate subterminal line, angled outwards to termen at veins 6, 5, 2, and angled inwards in submedian interspace. Hind wing dark reddish

brown. Underside of fore wing fuscous brown with white spot in upper part of cell towards extremity and the white postmedial patch.

Hab. Ecuador, Paramba (*Rosenberg*), type † ♂, ♀ in Coll. Rothschild, Lita. *Exp.* ♂ 32, ♀ 28 millim. This is probably a variety of *E. appunctata*.

1079. **Eucereon rosa**, insert (syn.) :—

Eucereon rosadora, Dyar, Pr. U.S. Nat. Mus. xxxviii. p. 231 (1910).
Eucereon rosadora, var. *xanthodora*, Dyar, Pr. U.S. Nat. Mus. xxxviii. p. 233 (1910).

A form with the crimson of abdomen and other parts replaced by orange-yellow.

1084. **Eucereon tarona**, insert (syn.) :—

Eucereon dilutius, Roths. Nov. Zool. xix. p. 172 (1912).

Brazil, Minas Geraes (*Kennedy*), type † ♂ in Coll. Rothschild.

*1085 *a*. **Eucereon rufidorsalis.** (Plate XVIII. fig. 9.)

Eucereon rufidorsale, Roths. Nov. Zool. xix. p. 179 (1912).

♂. Head and thorax whitish; antennæ fuscous except the base of shaft; palpi fuscous except extremity of 2nd joint; vertex of head with small brown spot, the back of head with some yellow; tegulæ with small brown spots; patagia edged with brown; pectus and legs white and brown, the coxæ yellow; abdomen pale crimson, the anal segment blackish, the ventral surface yellow. Fore wing dull white; an elongate subbasal fuscous brown mark on costa, spot below the cell and patch on inner margin; an elongate antemedial mark on costa followed by a curved series of four spots; a round spot in middle of cell and two spots in end of cell, the lower one elongate; a series of spots just beyond the cell, incurved below vein 3 and the three spots below vein 2 small; a subterminal maculate band from costa to vein 5 and two obliquely placed spots above tornus; a subapical spot with elongate mark above it on costa and five terminal spots between veins 7 and 2, the spot below vein 6 small. Hind wing semihyaline brownish white; the termen brown with diffused patches at apex and below vein 2.

Hab. Ecuador, Paramba, type † ♂ in Coll. Rothschild. *Exp.* 32 millim.

1085. **Eucereon punctata**, insert (syn.) :—

Eucereon ruficollis, Lathy, Entom. xxxii. p. 120 (1899).

1085 *b*. **Eucereon zamoræ.** (Plate XVIII. fig. 10.)

Eucereon zamoræ, Dogn. Ann. Soc. Ent. Belg. xxxviii. p. 681 (1894).
Eucereon punctatum, Hmpsn. Cat. Lep. Phal. B.M. i. p. 494 (part, nec Guér.).

A distinct species; fore wing much less suffused with grey.

Hab. Guatemala, Vera Paz (*Champion*), 1 ♀, Godman-Salvin Coll.; Ecuador, Zamora, type † in Coll Dognin. *Exp.* 40 millim.

*1085 *c*. **Eucereon fosteri.** (Plate XVIII. fig. 11.)

Eucereon fosteri, Roths. Nov. Zool. xix. p. 174 (1912).

Head and thorax brownish grey, the head yellowish behind; antennæ black; palpi with blackish streaks at sides of 1st and 2nd joints; frons and vertex of head, pro- and metathorax with small black spots; patagia edged with blackish; tibiæ suffused with blackish, the tarsi black ringed with white; abdomen crimson, the basal segment grey-brown, the anal segment black, lateral series of black spots, the ventral surface whitish. Fore wing brownish grey; obliquely placed blackish spots at base of costa and in cell; a subbasal maculate band; an antemedial series of spots, incurved below the cell and excurved at vein 1; a large round spot in middle of cell; a discoidal patch, constricted at middle and conjoined to a mark on costa; an incurved series of spots from below end of cell to inner margin, the spot below end of cell with a curved mark below it; a postmedial series of spots, sinuous to vein 2, then incurved; a subterminal maculate band from costa to below vein 5; a series of spots before termen with two spots in submedian interspace, and a terminal series of rather triangular spots. Hind wing semihyaline brownish white, the veins terminating in blackish points; the underside with the costal area suffused with fuscous.

Hab. Paraguay, Sapucay (*Foster*), type † ♀ in Coll. Rothschild, Patino Cuè, ♂. *Exp.* ♂ 38, ♀ 42 millim.

1087 *a*. **Eucereon dorsipuncta.** (Plate XVIII. fig. 12.)

Eucereon dorsipuncta, Hmpsn. A. M. N. H. (7) xv. p. 430 (1905).

Head and thorax grey; palpi blackish; frons, vertex of head, and tegulæ with black spots, back of head with pair of yellow spots; patagia slightly streaked with black; legs fuscous and white, the coxæ tinged with crimson; abdomen crimson with dorsal series of small black spots and the anal segment black, lateral black stripes and the ventral surface yellowish white. Fore wing white, the veins, costal and inner areas tinged with pale brown; subbasal black spots below costa and cell, the latter followed by a black streak above vein 1; antemedial black spots on costa, below cell, above and below vein 1, the spot above vein 1 displaced outwards; a spot in middle of cell with pale centre or divided by

a pale streak; a spot on costa above end of cell and two beyond the cell, an oblique series from vein 5 to inner margin, the spots above and below vein 4 wedge-shaped; a postmedial series of irregular spots, wedge-shaped below costa and streak-like above inner margin; a subterminal series of spots and terminal series of points. Hind wing white, the terminal area fuscous, broad at costa, narrowing to a point near tornus.

Hab. Venezuela, Caura Valley (*Klages*), 1 ♂, 1 ♀; Paraguay, Sapucay (*Foster*), 4 ♀ type. *Exp.* 34 millim.

*1087 *b*. Eucereon buchvaldi. (Plate XVIII. fig. 13.)

Eucereon buchwaldi, Roths. Nov. Zool. xix. p. 172 (1912).

♀. Head and thorax whitish mixed with brown, the back of head with two yellow spots; palpi with blackish marks at sides of joints; antennæ black, the shaft whitish above towards base and tips; patagia and dorsum of thorax with blackish brown streaks; legs streaked whitish and brown; abdomen pale crimson with dorsal series of black-brown spots and the extremity black-brown, diffused lateral brown stripes, the ventral surface white except at extremity. Fore wing brownish white; diffused subbasal brown marks below costa and cell and above inner margin; antemedial brown marks on costa and in and below the cell, two dentate marks above vein 1 and one below it; a brown annulus in middle of cell; a brown discoidal patch extending from costa to vein 2, constricted at middle and partially divided by the pale veins, an incurved series of four small spots from its inner edge below the cell to inner margin, and a series of four small spots beyond it from below costa to vein 3; a subterminal series of ten spots in the interspaces, incurved below vein 2, and a series of spots before termen. Hind wing pale semihyaline brownish.

Hab. Ecuador, Quevedo (*Buchwald*), type † ♀ in Coll. Rothschild. *Exp.* 32 millim.

1088 *a*. Eucereon atrigutta. (Plate XVIII. fig. 14.)

Eucereon atrigutta, Druce, A. M. N. H. (7) xv. p. 464 (1905).

Head and thorax grey; palpi at sides and frons black; back of head with crimson line; tegulæ and patagia with black spots; coxæ tinged with crimson; tibiæ and tarsi banded fuscous and white; abdomen crimson with slight dorsal black spots on terminal segments, the anal segment black, lateral black stripes, the ventral surface white. Fore wing white suffused in parts with grey; two obliquely placed black subbasal spots and a curved streak above inner margin; an antemedial oblique striga from costa, spot below cell and another further from base above vein 1; two spots in middle of cell and two in its extremity with a spot above them on the costa; two spots beyond end of cell, two between veins 5 and 3

further from base, a curved streak below end of cell and medial spots above and below vein 1; a postmedial series of small spots excurved between veins 5 and 3, then incurved; a subterminal spot below apex and spots on termen between veins 7 and 3 and below 2. Hind wing white, the terminal area fuscous, broad at costa and narrowing to a point at tornus.

Hab. Venezuela, Caura Valley (*Klages*), 2 ♂, 8 ♀. *Exp.* 32–34 millim.

1088 *b*. **Eucereon capsica**. (Plate XVIII. fig. 15.)

Erithales capsica, Schaus, J. N.Y. Ent. Soc. iv. p. 134 (1896).

♂. Head and thorax white; palpi with the 2nd joint mostly black at sides; vertex of head with black spot; neck with crimson ring; tegulæ with black spots, patagia with two spots; thorax with dorsal black streak; legs with some black markings; abdomen crimson with brownish patch at base of dorsum and short bands on the other segments, anal tuft blackish, a lateral series of blackish spots, the ventral surface white. Fore wing white with small black subbasal spots on costa and below the cell with obliquely placed points beyond them in and below cell; antemedial points below costa, cell, and vein 1; two points below middle of subcostal nervure and a curved lunulate mark below them; points in the two angles of cell with one above them on costa; a discoidal lunule; obliquely placed medial points below vein 2 and above and below 1; a point beyond upper angle of cell and three beyond lower angle; three small dentate postmedial marks below costa, the middle one nearest termen, then an oblique series of points between vein 5 and inner margin, the point below vein 2 displaced inwards; two obliquely placed points before apex and subterminal and terminal series. Hind wing semihyaline white, the terminal area tinged with fuscous.

Hab. Brazil, Castro Paraña, 1 ♂. *Exp.* 32 millim.

1088 *c*. **Eucereon formosa**. (Plate XVIII. fig. 16.)

Eucereon quadricolor, subsp. 1, Hmpsn. Cat. Lep. Phal. B.M. i. p. 495.
Eucereon formosum, Dogn. Le Nat. (2) xix. p. 9 (1905).
Eucereon formosum dognini, Roths. Nov. Zool. xix. p. 173 (1912).

1088. **Eucereon quadricolor**, insert (syns.):—

Eucereon quadricolor, boreale, Roths. Nov. Zool. xix. p. 173 (1912).
Eucereon quadricolor, meridionale, Roths. Nov. Zool. xix. p. 173 (1912).

Venezuela, San Esteban (*Klages*), type † ♂, ♀ *boreale* in Coll. Rothschild; Paraguay, Sapucay (*Foster*), type † ♂, ♀ *meridionale* in Coll. Rothschild.

1088 *d*. **Eucereon marcata.** (Plate XVIII. fig. 17.)

Eucereon marcata, Schaus, J. N.Y. Ent. Soc. ix. p. 43 (1901).

♂. Head and thorax brownish white; palpi black except the 1st joint and extremity of 2nd; frons with black patch; antennæ black except at base; neck with crimson ring; vertex of head and tegulæ with black spots; outer edge of patagia and thorax with black streaks; metathorax with black band; legs banded black and white; abdomen crimson, the 1st segment fuscous brown followed by three dorsal spots, the terminal segment black, a lateral series of black spots, the ventral surface pinkish white. Fore wing white with a slight brownish tinge; a subbasal black striga from costa, spot below the cell, and fascia on inner margin bent upwards at extremity; an antemedial black bar from costa angled outwards on subcostal nervure; an irregular medial black band emitting some short streaks below costa, then oblique, interrupted at submedian fold, angled outwards above inner margin and connected by a streak with the postmedial band; two spots in end of cell and a discoidal lunule; an irregular postmedial spot on costa, three small spots beyond the cell, an irregular rather ⋃-shaped spot below end of cell and bar from above vein 1 to inner margin; a 2nd postmedial band formed by irregular conjoined lunules from costa to vein 5 and incurved conjoined spots from vein 3 to inner margin connected with the ⋃-shaped spot; three subterminal spots towards costa, one on each side of vein 4 and two above tornus; a series of small spots on termen and cilia. Hind wing semihyaline grey-white, the veins, apical and tornal areas tinged with fuscous.

Hab. Paraguay, type † ♂ in U.S. Nat. Mus., Sapucay (*Foster*), 2 ♂. *Exp.* 36 millim.

1091 *a*. **Eucereon hyalina.**

Eucereon hyalinum, Kaye, Trans. Ent. Soc. 1901, p. 119, pl. v. f. 11.

♂. Head and thorax black-brown tinged with olive; a ring at back of head and throat orange; metathorax with yellowish spot; the coxæ at extremities and base of femora scarlet; abdomen black-brown with scarlet subdorsal bands on three subterminal segments. Fore wing with the series of black spots occupying nearly the whole wing; the veins grey; an antemedial grey line, angled on vein 1 and bent inwards to inner margin; a medial grey line angled on vein 1; a quadrate whitish spot between the round spot in middle of cell and the spots at end of it; the postmedial grey line waved, oblique from costa to vein 4 where it is angled and with a line before it between veins 6 and 4, then bent inwards to near origin of vein 2 and slightly excurved again; the subterminal

line angled outwards nearly to termen at vein 4; a yellowish mark on termen between veins 4 and 2 with two black dashes on it. Hind wing black with hyaline streaks in and below the cell and below vein 4 and between bases of veins 2 and 5.

Ab. 1. Abdomen with the scarlet bands on subterminal segments dorsally entire.—Venezuela.

Hab. Trinidad, Arima (*Kaye*), 1 ♂ type; Venezuela, Caura Valley (*Klages*), 5 ♂. *Exp.* 40 millim.

1091 *b*. **Eucereon pyrozona.** (Plate XVIII. fig. 18.)

Eucereon pyrozona, Hmpsn. A. M. N. H. (8) viii. p. 396 (1911).

♂. Head and thorax black-brown mixed with yellowish, the back of head and shoulders with paired pale crimson spots, the metathorax with yellowish white patch; coxæ crimson; abdomen black with orange-scarlet subdorsal spots on 5th segment and dorsal band on 6th to 8th segments. Fore wing black-brown with olive yellowish streaks on the veins and in discal and submedian folds; a curved olive subbasal line from costa to submedian fold; antemedial line slightly angled outwards below costa, then oblique to vein 1 and bent inwards to inner margin; a round dark spot at middle of cell defined on inner side by olive and on outer by a rather quadrate whitish patch; an olive discoidal striga; a sinuous olive line beyond the cell between veins 7 and 3; postmedial line pale olive, oblique from costa to vein 4 at subterminal line, then bent inwards to vein 2 below end of cell and erect to inner margin; subterminal line pale olive, oblique to vein 5, then bent inwards to the angle of postmedial line at vein 3, where it terminates on an ochreous terminal patch between veins 4 and 2 with two short black streaks on it. Hind wing black-brown with the interspaces hyaline in, below, and just beyond the cell.

Hab. Venezuela, Caura Valley (*Klages*), 5 ♂ type; Br. Guiana (*Rodway*), 1 ♂. *Exp.* 42–46 millim.

1091 *c*. **Eucereon cincta.** (Plate XVIII. fig. 19.)

Eucereon cinctum, Schaus, J. N.Y. Ent. Soc. iv. p. 134 (1896).

♂. Head and thorax dark brown; back of head crimson; patagia with slight yellowish streaks; metathorax with yellowish patch; coxæ yellowish white; abdomen black-brown, the three terminal segments orange-red or crimson, the anal tuft black, the ventral surface yellowish white except terminal segments. Fore wing deep reddish brown or black-brown, the veins paler or yellow-brown; a pale antemedial line slightly angled outwards below costa; a pale subquadrate patch in cell beyond middle; postmedial line pale,

minutely waved, angled outwards at vein 6 and inwards in discal fold, very oblique below vein 3; a pale minutely waved subterminal line, excurved at veins 6, 5 and angled inwards in submedian fold. Hind wing hyaline, the veins black; the terminal area black with irregular inner edge.

♀. Abdomen with the anal tuft crimson.

Hab. Venezuela, Aroa (not Trinidad), type † ♂ in U.S. Nat. Mus., Caura Valley (*Klages*), 6 ♂, 2 ♀. *Exp.* 28 millim.

*1091 *d*. Eucereon rubroanalis. (Plate XVIII. fig. 20.)

Eucereon rubroanale, Roths. Nov. Zool. xix. p. 172 (1912).

♂. Head and thorax very dark reddish brown, the back of head with two crimson spots, the patagia with pale streaks; palpi black, the 2nd joint in front and at extremity white; frons at sides and basal joint of antennæ in front white; neck with some crimson; coxæ, streaks on femora, the extremities of tibiæ, and rings at base and middle of tarsi white; abdomen with the basal half black-brown, the terminal half scarlet, the ventral surface black-brown with slight whitish spots. Fore wing very dark red-brown, the veins with paler streaks; traces of a pale curved antemedial line; a pale spot in upper part of cell towards extremity; a pale rather maculate postmedial line, excurved below vein 5 then incurved to below lower angle of cell, then oblique to middle of inner margin; a series of slight rather dentate pale marks in the interspaces before termen, ending on termen at vein 2; cilia whitish at tips, wholly white between veins 3 and 1. Hind wing semihyaline whitish suffused with dark brown, the terminal area black-brown; cilia whitish at tips. Underside of fore wing fuscous brown, a diffused whitish fascia below the cell, a white spot in upper part of cell towards extremity, and postmedial spots above and below vein 6; hind wing whitish, the costal and terminal areas fuscous brown, a dark mark on upper discocellular.

♀. Abdomen with the scarlet reduced to subdorsal spots before the anal tuft.

Hab. Venezuela, San Esteban (*Klages*), type † ♂ in Coll. Rothschild; Bolivia, Yungas de Coroico (*Garlepp*), type † ♀. *Exp.* ♂ 22, ♀ 24 millim.

1092. Eucereon sylvius, del. *Eucereon lutulentum*.

1092 *a*. Eucereon lutulenta.

Eucereon lutulentum, Möschl. Verh. zool.-bot. Ges. Wien, xxvii. p. 650, pl. 8. f. 18 (1878).

♂. Head and thorax brown and fuscous; back of head with two

yellow spots; metathorax with two whitish spots; coxæ pinkish; abdomen scarlet with large triangular dorsal brown basal patch, the anal segment black, the ventral surface brown with the first three segments pinkish white except at sides. Fore wing grey-brown; the basal area with two series of dark spots below costa and patches above and below vein 1; an antemedial maculate line angled outwards on vein 1; a round spot in cell bisected by a pale streak in discal fold; two spots in end of cell and a series beyond the cell becoming short streaks between veins 5 and 3, then bent inwards to origin of vein 2; small spots beyond the cell above veins 5 and 6; a postmedial series of wedge-shaped marks reduced to spots between veins 5 and 3; a subterminal series of small elongate spots, the spot below vein 2 large and conjoined to postmedial series; a terminal series of points on the veins. Hind wing fuscous black, the interspaces in, below, and beyond end of cell semihyaline. Underside of fore wing with white spot in upper angle of cell, two beyond the cell, and two nearer termen between veins 5 and 3.

Hab. Surinam, type † in Coll. Staudinger; Brazil, Amazons, R. Jarna (*Trail*), 1 ♂. *Exp.* 36 millim.

E. sylvius is a much darker species; fore wing black with fine pale markings.

1092 *b*. **Eucereon tessellata.** (Plate XVIII. fig. 21.)

Eucereon tessellatum, Schaus, A. M. N. H. (8) vi. p. 194 (1910).

♂. Head and thorax grey-brown; palpi black, the 1st joint and extremity of 2nd ochreous; frons above and back of head with paired ochreous spots, the vertex of head with black streak; tegulæ with black patches, the patagia with black stripes; pectus blackish; coxæ pink; legs streaked greyish and black, the tarsi black; abdomen black, the 4th, 5th, and 6th segments crimson with dorsal black points, the crimson extending at sides to 2nd segment, the ventral surface yellow except at extremity. Fore wing ochreous brown; black spots near base below costa and cell followed by a subbasal series of rather elongate black spots; an antemedial series of small black spots, bent inwards to inner margin and with elongate spot below costa; a round spot in middle of cell bisected by a pale streak in discal fold; two spots in end of cell, five spots just beyond the cell with four small spots beyond them and one above them on costa and four small spots from above base of vein 2 to inner margin; four rather elongate postmedial spots from costa to vein 5, a slight mark below vein 5 and an incurved series of four spots between vein 3 and inner margin; a subterminal series of elliptical spots and a terminal series of small triangular spots; the costa towards apex and cilia black. Hind wing black with

semihyaline streaks in, below, and just beyond lower angle of cell.

Hab. Costa Rica, Sitio (*Schaus*), 1 ♂. *Exp.* 40 millim.

*1092 *c*. Eucereon antonia. (Plate XVIII. fig. 22.)

Eucereon antonia, Druce, A. M. N. H. (7) xviii. p. 80 (1906).

♂. Head and thorax dark brown; frons greyish with brown spot; back of head yellowish and crimson; tegulæ, patagia, and vertex of thorax with greyish streaks; pectus and legs with some whitish, the coxæ with crimson patches; abdomen crimson with large black-brown dorsal patch on basal segments and the extremity black, lateral blackish fasciæ, the ventral surface pale crimson except at extremity. Fore wing brownish yellow; fuscous streaks from base below costa and cell and above and below vein 1, the last extending to the postmedial line; short antemedial streaks below costa and in cell and streaks extending to postmedial line below the cell and above vein 1; a round blackish spot in middle of cell bisected by a slight yellow streak; a round discoidal patch with yellow line on discocellulars, a small spot below it in lower angle of cell; a series of small spots above and beyond end of cell and a larger patch above base of vein 2; a yellowish postmedial line, excurved to vein 3, then incurved and with a curved mark from it to subterminal line between veins 5 and 3; the terminal area with the interspaces filled by fuscous patches leaving yellowish streaks on the veins; a greyish subterminal line, excurved from costa to vein 3 and ending on termen at vein 2, the streaks on the veins beyond it grey. Hind wing dark brown with slight greyish streaks in lower extremity of cell, below the cell, and between bases of veins beyond lower angle.

Hab. Peru, S. Domingo (*Ockenden*), type † in Coll. Joicey. *Exp.* 36 millim.

*1092 *d*. Eucereon hampsoni. (Plate XVIII. fig. 23.)

Eucereon hampsoni, Roths. Nov. Zool. xix. p. 176 (1912).

♂, Head and thorax reddish brown tinged with grey, the back of head with two yellowish spots, the metathorax with white patch; coxæ pale pinkish, the femora with whitish streaks, the tibiæ whitish at extremities; abdomen scarlet with dorsal dark brown patch on basal half and the extremity black, the ventral surface dark brown with pale pinkish patch except at extremity. Fore wing brownish grey; the basal area suffused with black-brown; a round black-brown spot in middle of cell confluent with some black-brown on costa and a patch below the cell; a large black-brown discoidal patch from costa to vein 2, broken up by the paler veins;

an oblique black-brown subterminal band from costa to vein 4, and a series of spots before termen. Hind wing dark brown, the lower part of cell and area just below and beyond it semihyaline. Underside of fore wing with white spot in upper part of cell toward extremity, postmedial spots above and below vein 6, and spots nearer termen above and below vein 4.

Hab. Bolivia, Sta. Cruz de la Sierra (*Steinbach*), type † ♂ in Coll. Rothschild. *Exp.* 32 millim.

1092 *e*. **Eucereon leprota.** (Plate XVIII. fig. 24.)

Eucereon leprota, Druce, A. M. N. H. (7) xv. p. 465 (1905).

Head and thorax pale brownish grey tinged in parts with fuscous; back of head with two yellow spots; abdomen crimson, a large triangular fuscous patch on basal segments, the anal segment fuscous, a lateral series of black spots, the ventral surface white. Fore wing grey-white; an oblique subbasal series of small fuscous spots from costa to vein 1; an antemedial series of small spots angled outwards on vein 1; a round spot in middle of cell, two spots in end of cell, and a series just beyond the cell expanding into a large patch beyond lower angle, then retracted to near origin of vein 2 and reduced to small spots; an indistinct postmedial line excurved between veins 5 and 3 and reduced to small spots below vein 2; a fuscous patch with dentate outer edge from costa to vein 5 and a spot on outer edge of postmedial line above vein 2; a subterminal series of small elongate spots and a larger spot in submedian interspace. Hind wing greyish fuscous, the cell and interspaces below and beyond it semihyaline white.

Hab. Venezuela, Caura Valley (*Klages*), 2 ♂, 1 ♀. *Exp.* 40 millim.

*1093 *a*. **Eucereon steinbachi.** (Plate XVIII. fig. 25.)

Eucereon steinbachi, Roths. Nov. Zool. xix. p. 172 (1912).

♀. Head and thorax greyish ochreous mixed with brown, the back of head with pair of yellow spots tinged with crimson; palpi blackish, the 2nd joint grey in front; antennæ black; tegulæ with brown patches, the patagia edged with blackish; coxæ crimson; legs fuscous, the femora and base of tibiæ streaked with white, and the latter white at extremities; abdomen crimson, with a grey-brown patch at base of dorsum, the extremity black, a lateral stripe formed by conjoined black spots. Fore wing ochreous white; blackish streaks from base below costa and cell and above and below vein 1; elongate antemedial black marks below costa and cell and above and below vein 1, and two slight marks in the cell, the mark below vein 1 conjoined to the basal streak and emitting a slight spur to middle of inner margin; a pair of semilunulate marks in

middle of cell divided by the discal fold; an elongate mark on costa above end of cell, two spots in end of cell, two beyond the cell, a spot above vein 6, two spots above veins 4, 3, 2 and elongate marks above and below submedian fold and above inner margin; a postmedial series of spots from costa to below vein 5, and a series in the interspaces before termen. Hind wing reddish brown; the underside whitish suffused with brown especially on costal and terminal areas.

Hab. Bolivia, Buenavista (*Steinbach*), type † ♀ in Coll. Rothschild. *Exp.* 40 millim.

1093 *b*. **Eucereon dentata.** (Plate XVIII. fig. 26.)

Eucereon dentatum, Schaus, P. Z. S. 1894, p. 229.

♂. Head and thorax grey-brown; palpi and antennæ black; back of head with black points on orange spots; tegulæ with black points; patagia edged with black; coxæ yellowish; legs streaked with black; abdomen dorsally crimson with triangular blackish patch at base, the extremity and lateral stripes black, the ventral surface yellowish. Fore wing grey-brown, the veins streaked with black; a highly dentate subbasal line; two dentate antemedial lines; a spot in middle of cell; a spot on discocellulars at upper angle of cell conjoined to a large patch at lower angle with a dentate line from its inner edge to inner margin; two dentate postmedial lines, a subterminal series of points in the interspaces, and a terminal series on the veins. Hind wing pale fuscous, rather deeper towards termen.

Hab. Mexico, Jalapa (*Schaus*), 1 ♂. *Exp.* 34 millim. Type † ♂ in U.S. Nat. Mus.

*1094 *a*. **Eucereon obliquifascia.** (Plate XVIII. fig. 27.)

Eucereon obliquifascia, Roths. Nov. Zool. xix. p. 175 (1912).

♀, Head and thorax red-brown, spots on vertex of head and tegulæ and the edges of patagia darker; antennæ with the basal joint whitish in front; coxæ whitish, the femora streaked with whitish; abdomen crimson with dorsal red-brown patch on basal half followed by small black spots and the extremity black, lateral brown streaks, the ventral surface yellowish white with the extremity brown. Fore wing red-brown; some diffused dark subbasal streaks; two antemedial dark spots in cell, two obscure streaks in submedian interspace and some suffusion above inner margin; a rounded blackish mark in middle of cell divided by the discal fold, connected with an oblique mark from costa and elongate spot in lower end of cell; a large discoidal black-brown patch extending from costa to vein 2 and broken up by the paler veins, defined on outer side by the indistinct waved greyish postmedial line, which is

excurved beyond the cell and defined on outer side by small dark spots, below vein 2 oblique and defined on each side by dark marks; an obscure subterminal band from costa to discal fold, then a series of slight bars; an obscure dentate dark line just before termen from apex to vein 3 and a dark mark on termen in submedian interspace. Hind wing semihyaline whitish tinged with red-brown, the veins and terminal area suffused with red-brown. Underside of fore wing with white spot in upper part of cell toward extremity and maculate postmedial band from below costa to vein 3.

Hab. Trinidad, Port of Spain (*Birch*), type † ♀ in Coll. Rothschild. *Exp.* 40 millim.

1095 *a*. **Eucereon cimonis.** (Plate XVIII. fig. 28.)

Eucereon cimonis, Schaus, A. M. N. H. (8) vi. p. 193 (1910).

♂. Head and thorax grey-brown; palpi black, the 1st joint and extremity of 2nd grey; two yellow spots at back of head; tegulæ, edges of patagia, and dorsum of thorax with black streaks; pectus blackish; mid and hind coxæ yellow; legs black and grey; abdomen black, the 4th, 5th, and 6th segments crimson with small dorsal black spots, the crimson extending at sides to 2nd segment, the ventral surface deep yellow except at extremity. Fore wing grey-brown; an oblique black streak below base of cell; two subbasal black streaks below costa and two below the cell; an antemedial series of black streaks, the two in cell short and the series angled inwards at submedian fold and to inner margin; two elliptical spots in middle of cell, two spots in end of cell, the spot in lower angle minute, a spot on costa above end of cell, four spots just beyond the cell forming short streaks between veins 5 and 3 and with four short streaks beyond them, a large elliptical spot above base of vein 2 and three small obliquely placed spots between vein 2 and inner margin; four dentate postmedial spots between costa and vein 5, oblique striæ below veins 5 and 4, a dentate spot below vein 3 and three streaks between vein 2 and inner margin; a subterminal series of elliptical spots and a terminal series of small triangular spots at the veins. Hind wing black with semihyaline streaks in, below, and just beyond lower part of cell.

Hab. Costa Rica, Juan Vinas (*Schaus*), 1 ♂. *Exp.* 44 millim.

*1095 *b*. **Eucereon flemmingi.** (Plate XVIII. fig. 29.)

Eucereon flemmingi, Roths. Nov. Zool. xix. p. 176 (1912).

♂. Head and thorax red-brown mixed with greyish, the back of head with two pale red spots, the patagia with darker edges; pectus with whitish marks, the coxæ and streaks on femora whitish; abdomen scarlet with dorsal grey-brown patch on basal half and the

extremity black, the ventral surface brownish white with the extremity and lateral streaks dark brown. Fore wing greyish suffused with reddish brown; subbasal blackish marks below costa and cell; antemedial line blackish, forming a patch at costa and spot below the cell, very strongly angled inwards in submedian fold and excurved at vein 1; a round blackish spot in middle of cell; a large blackish discoidal patch from costa to vein 2, broken up by the paler veins; postmedial line greyish defined on each side by small black-brown spots, oblique and sinuous to vein 4, then very strongly incurved; a maculate black-brown subterminal patch from costa to vein 5 and patches below vein 3 and on inner margin; a series of black-brown spots before termen from apex to vein 2 and a spot on termen in submedian interspace. Hind wing semi-hyaline brownish, the terminal area suffused with dark brown expanding from apex to below vein 2. Underside of fore wing with white spot in upper part of cell towards extremity and oblique maculate band from below costa beyond middle to near termen at vein 3.

Hab. Ecuador, Lita (*Flemming*), type † ♂ in Coll. Rothschild. *Exp.* 46 millim.

1096. **Eucereon pilati**, insert:—

Eucereon erythrolepis, Dyar, Pr. U.S. Nat. Mus. xxxviii. p. 233 (1910).

A form with the fore wing paler, especially the streaks on the veins which are greyer brown.

Mexico, Jalapa, Orizaba.

*1096 *a*. **Eucereon pallada.** (Plate XVIII. fig. 30.)

Eucereon pallada, Druce, A. M. N. H. (7) xviii. p. 80 (1906).

♂. Head and thorax pale ochreous brown; palpi black, the basal joint ochreous with black spot, the extremities of 2nd and 3rd joints with ochreous spots; frons with black spot; antennæ ringed with black; vertex of head, dorsum of thorax, tegulæ and patagia streaked with black; pectus with some black; legs streaked with black, the coxæ pale crimson; abdomen crimson with large dorsal brown patch on basal segments followed by black points, the extremity black, lateral black streaks, the ventral surface pale crimson except at extremity. Fore wing pale brownish ochreous with reddish brown streaks on the veins and in discal and submedian folds to near termen; black streaks from base below costa and in and below the cell and above inner margin, with small wedge-shaped black spots beyond them below the cell and above vein 1 and two slight streaks below costa; an oblique antemedial striga from costa and two minute streaks in the cell; two short streaks in middle of cell and two small spots in end of cell; a spot beyond the cell;

a postmedial series of small elongate spots and larger spot above vein 2, excurved to vein 4, then very oblique, with another series of small spots beyond it from below costa to vein 3, a subterminal series of small wedge-shaped streaks with larger mark above vein 2, very oblique below vein 3; a series of wedge-shaped spots just before termen; a series of small elongate spots on extremity of the veins and base of cilia. Hind wing semihyaline whitish tinged with brown, the veins blackish, the terminal area suffused with fuscous brown.

Hab. Brazil, Castro Paraña (*D. Jones*), type † ♂ in Coll. Joicey. *Exp.* 40 millim.

*1098 *a*. **Eucereon patula.** (Plate XVIII. fig. 31.)

Eucereon patula, Dognin, Hét. Nouv. Am. Sud, iii. p. 5 (1911).
Eucereon patronides, Roths. Nov. Zool. xix. p. 173 (1912).

♂. Head pale brownish ochreous; palpi black, pale in front and with pale ring at extremity of 2nd joint; antennæ black with pale rings; vertex of head with black streak and pair of black marks behind; tegulæ black with pale streaks, the patagia black with pale upper edge, the dorsum of thorax with pale and black streaks, the metathorax white; pectus black and pale brownish; legs black, ochreous brown in front, the coxæ ochreous tinged with scarlet; abdomen scarlet, the base, a dorsal series of spots, and the extremity black, lateral black fasciæ expanding triangularly at the joints, the ventral surface yellow with black segmental lines and the extremity black. Fore wing pale ochreous brown, the veins black; subbasal line represented by two oblique black striæ from costa and an oblique striga below the cell; an irregular black fascia in submedian interspace from near base to the postmedial line indented by an oblique pale mark below base of vein 2 and a spot above middle of vein 1; antemedial line represented by some dentate black marks from costa and in cell and a streak above inner margin; some irregular black markings in and beyond end of cell and an oblique black striga from middle of costa; postmedial line black and irregularly dentate from costa to vein 4, then very oblique and forming the outer edge of the black fascia and again dentate above inner margin, a series of dentate black marks beyond it from below costa to vein 4, then an oblique series of slight black streaks in the interspaces; a series of short black streaks before termen and a fine terminal black line. Hind wing brownish white, the veins dark brown; the inner area towards tornus and the apical area suffused with fuscous; the termen and cilia fuscous; the underside with the costal area suffused with fuscous.

Hab. Peru, Carabaya, St. Domingo, type † ♂ in Coll. Dognin, and type † ♂ *patronides* in Coll. Rothschild. *Exp.* 46 millim.

*1098 *b*. Eucereon conspicua. (Plate XVIII. fig. 32.)

Eucereon conspicuum, Roths. Nov. Zool. xix. p. 174 (1912).

♂. Head and thorax black-brown; palpi pale yellow in front towards tips; frons and vertex of head yellowish white, the latter with black spots behind antennæ; neck with crimson ring; tegulæ with yellowish white dorsal stripes, the dorsum of thorax yellowish white with black streak; throat and coxæ with pale crimson patches; pectus with lateral white patches; abdomen pale crimson, the basal segment dark brown, a dorsal series of black spots and the anal segment black, the ventral surface black with pale crimson bands except towards extremity. Fore wing yellow with black-brown streaks on the veins and in discal and submedian folds; the basal area velvety black-brown leaving a yellowish white mark at base and yellow marks before the antemedial black-brown line, which forms a bar from costa, then incurved to submedian fold, then excurved, and strongly retracted to inner margin towards which it becomes obsolescent; a black-brown spot in middle of cell; a large velvety black-brown patch at end of cell extending from below costa to submedian fold and connected by bars with the costa and vein 1, its edges irregular and its outer edge strongly excurved between veins 5 and 2; a somewhat dentate postmedial line from below costa to the outer edge of the patch at vein 4; a subterminal black-brown band with irregular edges from costa to below vein 5, and a series of short streaks in the interspaces before termen; a fine dark terminal line forming small spots at the veins. Hind wing semihyaline whitish tinged with brown, the veins and termen brown, the apical area broadly brown. Underside of fore wing brown with a whitish spot in upper part of cell towards extremity.

Ab. 1. Pectus and abdomen with the crimson replaced by yellow.

Hab. Costa Rica, Carreblanco; Ecuador, Paramba (*Flemming*), type † ♂ in Coll. Rothschild. *Exp.* 50 millim.

*1099 *a*. Eucereon servator. (Plate XIX. fig. 1.)

Eucereon servator, Kaye, Ent. Rec. xxii. p. 115 (1914).

♀. Head and thorax pale ochreous brown; palpi black-brown except at extremities of 2nd and 3rd joints; antennæ black-brown; back of head with pair of oblique black striæ, the dorsum of tegulæ with black line; a broad black-brown fascia on outer edge of tegulæ and on patagia; metathorax with white patch; neck with some scarlet at sides; pectus black-brown and whitish; legs dark brown with ochreous white bands on tibiæ and tarsi; abdomen scarlet with dorsal black-brown triangular patch on basal segments followed by slight points, the extremity and sides black-brown, the ventral surface with broad ochreous white bands on four basal segments. Fore wing ochreous whitish tinged and irrorated with red-brown; a broad oblique diffused black-brown fascia from beyond the cell

below vein 5 to above base of inner margin; an oblique black subbasal striga from costa and two points below the cell; antemedial obliquely placed streaks on and below the costa, then traces of a line bent inwards to inner margin; some black-brown marks on postmedial half of costa, and traces of a postmedial line strongly incurved below vein 4, a patch of black-brown suffusion beyond it above and below vein 5 and a patch on apical area; a series of short black-brown streaks before termen; a fine black-brown terminal line forming slight spots at base of cilia at the extremities of the veins. Hind wing semihyaline white tinged with red-brown especially on inner area; cilia red-brown. Underside of fore wing and costal area of hind wing reddish brown.

Hab. Venezuela, Caracas, type † ♀ in Coll. Kaye. *Exp.* 46 millim.

*1102 *a*. **Eucereon surcata.** (Plate XIX. fig. 2.)

Theages surcata, Dogn. Ann. Soc. Ent. Belg. xli. p. 25 (1897).

♀. Head and thorax brown; basal joint of antennæ and patches on back of head orange; pectus and coxæ ochreous white; abdomen black-brown, the last two segments orange, the ventral surface yellowish with the last two segments edged with brown. Fore wing whitish tinged with pale olive-brown, a brown spot below base of cell; subbasal, antemedial, two postmedial, and two subterminal irregularly waved lines, the 2nd postmedial with spot on it below vein 3, the 1st subterminal at vein 6 and below 2 and the 2nd subterminal below costa and where it ends on termen at vein 3; a spot in middle of cell and a bar before discocellulars. Hind wing fuscous.

Hab. Ecuador, Loja, type † ♀ in Coll. Dognin. *Exp.* 44 millim.

1102 *b*. **Eucereon decora.** (Plate XIX. fig. 3.)

Eucereon decorum, Schaus, A. M. N. H. (8) vi. p. 193 (1910).

Head and thorax fuscous; palpi orange at base and with white ring at base of 3rd joint; sides of frons with white spots; back of head orange; patagia and vertex of thorax with paired whitish stripes, the metathorax with whitish patch; femora and fore tibiæ with whitish streaks; abdomen fuscous, the extremity orange, sublateral series of white patches. Fore wing whitish tinged with ochreous brown to the postmedial line, the veins, discal and submedian folds with blackish streaks; antemedial line blackish, excurved in cell and slightly in submedian interspace; discocellulars black; postmedial line blackish, slightly excurved below costa and at middle and incurved at discal fold, below vein 4 bent inwards to submedian fold below origin of vein 2, then slightly sinuous; subterminal line blackish, excurved and forming a spot below vein 7, excurved at middle, incurved between veins 3 and 2 and ending at tornus; a fine black terminal line. Hind wing

whitish, the veins streaked with fuscous, the terminal area suffused with fuscous.

Hab. Costa Rica, Sitio (*Schaus*), 1 ♂, Tuis (*Schaus*), 1 ♀; Colombia, 1 ♂. *Exp.* 48 millim.

*1102 *c.* Eucereon bricenoi. (Plate XIX. fig. 4.)

Eucereon bricenoi, Roths. Nov. Zool. xix. p. 174 (1912).

Head and thorax black-brown mixed with some whitish; the back of head with two orange patches, the patagia streaked with orange; the metathorax with whitish patch; femora and tibiæ streaked with whitish; abdomen fuscous brown, the two terminal segments with quadrate orange dorsal patch, sublateral series of white patches except at extremity. Fore wing whitish, the basal half, area near end of cell, and apical area tinged with fulvous yellow, the veins, discal and submedian folds streaked with black; a blackish antemedial line, bent outwards in cell where it forms a patch and angled outwards in submedian fold; a curved blackish line from costa to the discocellulars at discal fold; postmedial line blackish, arising from costa at the same point as the curved line; oblique to vein 4, then bent inwards to near origin of vein 2 and waved to inner margin; a diffused waved blackish subterminal line conjoined by streaks with the termen on apical area, angled inwards at vein 5, bent outwards to termen at middle, incurved below vein 3, and ending on termen at submedian fold; a black terminal line except at apex and between veins 3 and 2. Hind wing semihyaline whitish tinged with brown; the veins and termen brown, the latter rather broadly at apex.

Hab. Colombia, Choachi; Venezuela, Merida (*Briceno*), type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 46, ♀ 52 millim. Probably a rather pale aberration of *E. flavicaput*.

*1102 *d.* Eucereon griseata. (Plate XIX. fig. 5.)

Eucereon griseatum, Roths. Nov. Zool. xix. p. 174 (1912).

♀. Head black with two orange spots behind; palpi with white spots at extremity of 2nd joint in front; frons with white bar above; antennæ with the shaft ringed with white towards base; thorax black, the tegulæ with white spots at sides, the shoulders with orange spots, the patagia white edged with black and with streak at middle, the dorsum of thorax with pair of white streaks; pectus white at sides, the femora and tibiæ streaked with white; abdomen black-brown with quadrate orange patch on two terminal segments and sublateral series of whitish patches except towards extremity. Fore wing creamy white suffused with olive-yellow to the postmedial line, the veins, discal and submedian folds, and inner margin streaked with black; antemedial line black, forming a spot at costa, bent outwards in upper part of cell, incurved at median nervure, and angled outwards in submedian fold; a spot on costa above end of cell with an incurved line from it to the

discocellulars at discal fold; postmedial line black, arising from the spot above end of cell, oblique and sinuous to vein 3, then bent inwards to vein 2 near its origin and incurved to inner margin; subterminal line black, rather diffused and waved, excurved and forming a patch below vein 7, angled inwards at vein 5, excurved and connected with the termen at middle, then incurved, forming a patch below vein 3 connected with a spot on termen in submedian fold; a black spot just before apex and terminal line from below apex to vein 4. Hind wing semihyaline brownish white, the terminal area suffused with fuscous narrowing to tornus. Underside of fore wing suffused with fuscous leaving a white patch in cell and oblique maculate band from below costa beyond middle to vein 3 near termen; hind wing with the costal area suffused with fuscous.

Ab. 1. Hind wing wholly suffused with fuscous brown.

Hab. Peru, Carabaya, Tinguri (*Ockenden*), type † ♀ in Coll. Rothschild, S. Domingo, R. Suambari, La Oroya, Chanchamayo. *Exp.* 46 millim.

*1102 *e*. **Eucereon albidia.** (Plate XIX. fig. 6.)

Eucereon albidius, Roths. Nov. Zool. xix. p. 174 (1912).

♂. Head and thorax brownish white, the back of head with two yellow spots; palpi, frons, and antennæ black, the last ringed with white towards base; tegulæ and patagia edged with blackish, the dorsum of thorax with blackish streak; pectus and legs black-brown, the pectus with whitish marks at sides, the femora streaked with whitish; abdomen black-brown with dorsal yellow patch on two terminal segments and sublateral white patches except towards extremity. Fore wing whitish, the veins, discal and submedian folds streaked with black-brown; some black-brown at base of inner margin; antemedial line black-brown, diffused towards costa, angled outwards in upper part of cell, inwards on median nervure, outwards in submedian fold, then oblique; a diffused black-brown discoidal patch extending to costa; postmedial line blackish, arising from the costal patch, oblique and sinuous to vein 4, then very strongly incurved to middle of inner margin; subterminal line blackish, rather diffused and waved, excurved and forming a patch below vein 7, angled inwards at vein 5, excurved to termen at middle, then incurved, forming a patch below vein 3 connected with a spot on termen in submedian fold; a blackish spot just before apex; the cilia blackish to vein 4 and towards tornus. Hind wing black-brown. Underside of fore wing black-brown with a white spot in upper part of cell towards extremity and maculate band from below costa beyond middle to termen below vein 3; hind wing with some whitish below the cell.

♀. Underside of hind wing with the cell whitish.

Hab. Brazil, Amazons, Fonte Boa (*Klages*), type † ♂ in Coll. Rothschild, Manãos (*M. de Mathan*), ♀, Rio Janeiro. *Exp.* 52 millim.

1103 *a*. **Eucereon xanthura.** (Plate XIX. fig. 7.)

Eucereon xanthura, Schaus, A. M. N. H. (8) vi. p. 192 (1910).
Eucereon schausi, Roths. Nov. Zool. xix. p. 175 (1912).
Eucereon apicaflava, Kaye, Ent. Rec. xxii. p. 115 (1914).

Head greyish fuscous, the frons with white bar above, the basal joint of antennæ white in front, the back of head with pair of yellow spots; thorax grey mixed with white, the patagia with black streaks and white edges, the dorsum of thorax with pair of white stripes; pectus and legs fuscous, the femora and base of mid tibiæ streaked with white; abdomen fuscous, the extremity yellow, sublateral series of white patches except on terminal segments. Fore wing white, the veins, discal and submedian folds streaked with black; antemedial line with oblique black bar from costa, then slight and angled inwards on median nervure, then almost obsolete and angled outwards at submedian fold; an oblique black lunule from costa to lower angle of cell with some white in centre; postmedial line represented by a series of short black dashes on the veins, oblique from costa to vein 4, then very obliquely incurved to middle of inner margin and with traces of a line between them; subterminal line black, with spot at costa, angled outwards below veins 7 and 6, bent outwards to near termen from above vein 4 to vein 3, then bent inwards to vein 2 and outwards to tornus, at vein 3 connected by an oblique bar with the termen; a black spot on costa before apex. Hind wing whitish tinged with fuscous, the terminal area darker, the veins slightly streaked with black; the underside white with the veins, costal area, and terminal area to vein 1 suffused with fuscous.

Hab. Mexico, Jalapa (*Schaus*), type † ♂ *schausi* in Coll. Rothschild; Costa Rica, Juan Vinas (*Schaus*), 1 ♀; Colombia, Don Amo (*H. H. Smith*), 3 ♂, Sierra del Libano (*H. H. Smith*), 1 ♀; Ecuador, Paramba; Venezuela, Caracas, type † *apicaflava* in Coll. Kaye; Brazil, Rio Janeiro, Tijuca (*Wagner*), 2 ♀. *Exp.* 44 millim.

*1105 *a*. **Eucereon tessellata.** (Plate XIX. fig. 8.)

Eucereon tessellatum, Roths. Nov. Zool. xix. p. 175 (1912).

♂. Head and thorax brownish grey, the back of head with pair of orange spots; palpi, frons, and antennæ black, the last brownish grey towards base; tegulæ and patagia edged with black, the prothorax with black streak; pectus and legs black-brown, spots on shoulders and coxæ orange, some whitish below the wings and on extremities of femora and base of tibiæ; abdomen orange-yellow with dorsal black-brown patch on basal half and the extremity black, the ventral surface black-brown with yellow patch on basal half. Fore wing brownish white, the veins streaked with blackish; the basal area suffused with black-brown below the cell; antemedial line blackish, forming a streak on costa, angled outwards on median nervure and very strongly excurved below submedian fold; a diffused oblique black-brown bar from middle

of costa to a large diffused black-brown discoidal patch extending from costa to vein 2 and its outer edge excurved beyond the angles of cell, a faint sinuous line from it to inner margin; a diffused maculate line from costa towards apex to termen at vein 4, a maculate subapical line, and an oblique patch from vein 3 to termen in submedian interspace. Hind wing semihyaline white, the veins and terminal area black-brown, the latter expanding widely on apical area and below vein 2. Underside of fore wing black-brown with maculate whitish band from below costa beyond middle to vein 3 towards termen; hind wing with the costal area suffused with black-brown.

Hab. Venezuela, Caura R., La Vuelta (*Klages*), type † ♂ in Coll. Rothschild, Maripa; Surinam, Marœwym Valley, Arœwarwa Creek; Brazil, Amazons, R. Madeira, Allianca. *Exp.* 36 millim.

*1106 *a*. **Eucereon atrata.** (Plate XIX. fig. 9.)

Eucereon marmoratum ab. *atratum*, Roths. Nov. Zool. xix. p. 175 (1912).

♂. Head and thorax fuscous brown tinged with grey, the edges of patagia and a streak on dorsum of thorax darker; abdomen brownish yellow with dorsal dark brown patch on basal half and the extremity and lateral streak black, the ventral surface black-brown towards extremity. Fore wing brown suffused with grey; traces of an irregular blackish subbasal line; antemedial line black-brown, forming a spot at costa, strongly angled inwards in submedian fold and outwards above vein 1 where it is connected with the postmedial line; a dark annulus at upper end of cell connected with the costa, the postmedial line arising from its upper edge, excurved beyond the cell, at vein 2 recurved upwards into the middle of cell, then angled outwards in submedian fold and inwards above vein 1 to the antemedial line; a diffused waved dark subterminal shade, angled inwards at vein 5 to the postmedial line, and connected with a dark mark on termen at submedian fold with some whitish above it. Hind wing semihyaline brown, the veins and terminal area dark brown. Underside of fore wing brown with whitish mark in cell towards extremity and traces of a diffused whitish band from below costa beyond middle to near termen at vein 3; hind wing with the cell and area below and beyond it whitish.

Hab. Venezuela, Caura R., La Union (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 44 millim.

1110. **Eucereon striata**, insert:—

Eucereon striatum, pallescens, Roths. Nov. Zool. xix. p. 177 (1912).

Slightly paler and fore wing with the markings less strongly developed.

Brazil, Castro Paraña (*D. Jones*), type † ♂, ♀ in Coll. Rothschild.

1110 *a*. **Eucereon perstriata.** (Plate XIX. fig. 10.)

Eucereon perstriata, Hmpsn. A. M. N. H. (8) iv. p. 349 (1909).

♂. Head and thorax greyish mixed with dark brown; back of head with two yellow spots; gulæ yellow; patagia with dark streaks near edges; vertex of thorax with fine dark streak; abdomen dark brown with paired subdorsal and sublateral yellow patches on two terminal segments, the three basal segments with paired ventral whitish spots. Fore wing ochreous whitish, the veins and interspaces streaked with dark brown; an incurved antemedial brown line from cell to vein 1; the medial part of costa dark brown; a dark brown patch in middle of cell; reniform represented by an oblique striga above and small spot below on inner side and faint brown line on outer; postmedial line double, strongly excurved from costa to vein 4, then strongly incurved, crossed by a rather sinuous dark streak on vein 2 extending to the subterminal pale line which arises as a pale streak from termen below apex, excurved to near termen at vein 2 and forming two pale streaks in submedian interspace; apical area dark brown. Hind wing semihyaline whitish, the apex and veins of terminal area tinged with brown; a fine brown terminal line.

Hab. S.E. Peru, S. Domingo (*Ockenden*), 1 ♂ type. *Exp.* 44 millim.

*1112 *a*. **Eucereon picoides.** (Plate XIX. fig. 11.)

Eucereon picoides, Roths. Nov. Zool. xix. p. 177 (1912).

♂. Head white; palpi black-brown with white spot at extremity of 2nd joint in front; lower part of frons and antennæ black-brown; tegulæ black-brown with white spots at sides; thorax white, the shoulders and patagia near upper edge with wedge-shaped black-brown patches, the prothorax with black-brown streak and the metathorax with black-brown patch; pectus and legs black-brown, the mid and hind coxæ and a spot on mid tibiæ near base white, the hind tibiæ with the spurs and a ring at extremity white; abdomen yellow with large dorsal black-brown patch extending to towards extremity, the anal segment and lateral series of spots black, the ventral surface white except at extremity. Fore wing creamy white; the subbasal area black-brown, its outer edge oblique from median nervure to vein 1 where the black-brown is conjoined to a large rather quadrate antemedial patch on inner margin; the medial area black-brown conjoined to a quadrate patch in middle of cell confluent with an elongate mark below the cell; a large discoidal patch confluent with the dark costal area and slightly broken up by pale marks on the veins, its outer edge excurved beyond the angles of cell, a maculate band from it to inner margin confluent with the subterminal markings, the spot on inner margin large; a triangular black-brown subterminal patch from costa to vein 5, its outer edge waved, and a curved maculate band from it to tornus; terminal spots above and below veins

6 and 4 with the cilia beyond them dark. Hind wing whitish suffused with brown, the veins and terminal area except towards tornus darker. Underside of fore wing dark brown with white spots in upper part of cell towards extremity; postmedial spots from costa to vein 5, subterminal spots from below apex to termen above tornus and some white on termen at apex and above middle; hind wing white, the costal and terminal areas dark brown.

Hab. COLOMBIA, Sta. Marta, Onaca (*Engelke*), type † ♂ in Coll. Rothschild. *Exp.* 42 millim.

1112 *b*. **Eucereon consorta.** (Plate XIX. fig. 12.)

Eucereon consorta, Schaus, A. M. N. H. (8) vi. p. 192 (1910).

Head and thorax white; palpi black, the 2nd joint white in front towards tips, the 3rd joint white at tips; frons with the lower part black at sides; antennæ black; tegulæ edged with black; basal half of patagia with two black streaks; metathorax with black patch; pectus and legs black, the coxæ white, the femora and mid and hind tibiæ with white spots; abdomen yellow with large dorsal black-brown patch extending to 6th segment, the extremity black, lateral series of black patches, the ventral surface white, the terminal segments black. Fore wing ochreous white; an irregular black patch on costa near base, produced in cell and connected with a black fascia on basal part of inner margin expanding into two projections above vein 1 before middle; a small antemedial black spot below the cell and two confluent spots on vein 2 near its base; a round spot in middle of cell connected with a patch on costa; a large irregular patch from costa to lower angle of cell; a patch formed of three conjoined marks, the upper one minute, from below vein 2 to inner margin and an oblique triangular mark with minute spot above its outer angle from below end of cell to termen just above tornus; a patch from costa towards apex to discal fold, its outer edge angled outwards below a spot on costa just before apex; a spot on termen below vein 7, point at discal fold, and spots below veins 5 and 4. Hind wing fuscous, the lower part of cell and areas just below and beyond it semihyaline, especially in male.

Hab. COSTA RICA, Tuis (*Schaus*), 1 ♂, 2 ♀, Juan Vinas (*Schaus*), 3 ♀, Sitio (*Schaus*), 1 ♀. *Exp.* 46 millim.

1113 *a*. **Eucereon occendeni.** (Plate XIX. fig. 13.)

Eucereon occendeni, Druce, A. M. N. H. (7) xviii. p. 80 (1906).

♂. Head and thorax black; palpi white at tips, upper part of frons and streaks at sides of head white; outer side of tegulæ, patagia at shoulders and middle, pro- and metathorax with white patches; pectus behind, femora, tibiæ, and tarsi with white patches; abdomen black-brown tinged with blue towards extremity, the 3rd to 7th segments with subdorsal orange patches, the ventral surface white except at extremity. Fore wing black with very irregular broad white markings; a white patch at base; an antemedial band

strongly angled outwards below costa, then oblique and not reaching inner margin, connected by a fascia in submedian interspace expanding into a patch at middle with the postmedial band; a streak on middle of costa connected with an irregular spot in cell; an oblique discoidal bar, its upper extremity connected with the postmedial band which is indented on inner side below costa, very oblique below vein 5, its outer side strongly indented below vein 3, angled outwards on vein 1 and narrowing to inner margin; a subterminal band angled inwards below costa, then excurved, confluent with the postmedial band at middle and ending on termen at vein 2, connected with an apical spot and with termen by short streaks on veins 6 and 5; the termen with minute streaks at veins 4, 3; a very oblique white bar from vein 2 to tornus. Hind wing semihyaline white, the veins and margins black; the apical area black emitting a short streak inwards in discal fold; the underside with the costal area broadly black except just beyond cell, a minute white spot on it in cell.

Hab. Peru, Aqualani (*Ockenden*), type † ♂ in Coll. Joicey, S. Domingo (*Ockenden*), 1 ♂. *Exp.* 46 millim.

*1113 *b*. **Eucereon tigrisoma.** (Plate XIX. fig. 14.)

Eucereon tigrisoma, Roths. Nov. Zool. xix. p. 177 (1912).

♀. Head and thorax white; palpi black with white ring at extremity of 1st joint; antennæ black; lower part of frons and a patch on vertex of head black; neck with yellow ring; tegulæ with dorsal black patch; patagia with black edges; pro- and metathorax with black patches; pectus fuscous; coxæ with white patches; legs black and white; abdomen black-brown with subdorsal yellow patches on 3rd to anal segments, the ventral surface white except the two terminal segments. Fore wing white; a subbasal black band constricted in cell and angled outwards on median nervure and above inner margin; an antemedial streak on costa and spots below median nervure and above vein 1; a large round spot in middle of cell, two conjoined spots in end of cell, a spot beyond the cell, a spot on costa above end of cell, a small spot beyond upper angle and two beyond lower angle, an oblique series of four spots from below the cell to inner margin, a small postmedial spot below vein 2 and larger spot on inner margin, and an oblique series of three conjoined spots from lower angle of cell to tornus; a curved subterminal spot from costa to vein 6, a spot below vein 6, and small spots below veins 5 and 4; an elongate mark on apical part of costa and a subapical spot; five spots on termen from below vein 8 to below 3, the spots below veins 6 and 3 small. Hind wing semihyaline white, the veins and inner margin suffused with fuscous; a diffused fuscous patch on apical area extending to vein 3 and a triangular patch in submedian interspace; cilia white chequered with fuscous to vein 3 and fuscous towards tornus.

Hab. Brazil, Preto, type † ♀ in Coll. Rothschild. *Exp.* 42 millim.

1115 *a*. Eucereon relegata. (Plate XIX. fig. 15.)

Eucereon relegatum, Schaus, A. M. N. H. (8) vii. p. 182 (1911).

♂. Head and thorax grey-brown suffused and obscurely streaked with black, the back of head with two slight yellow spots; palpi with the first joint ochreous in front; coxæ, streaks on femora, and rings at end of tibiæ and base of tarsi and spurs ochreous; abdomen orange-yellow with black-brown triangular patch on basal half of dorsum followed by a black fascia, the extremity and lateral fascia black, the ventral surface ochreous white except terminal segments. Fore wing ochreous mostly suffused with fuscous brown, the veins with dark streaks; subbasal black spots defined by ochreous below costa and cell; an antemedial series of four elongate spots followed by four other spots, the spot in cell large and the three below the cell obliquely placed; a wedge-shaped spot in upper angle of cell and elongate spots in and below lower angle; four spots beyond the cell; an obliquely curved postmedial series of nine elongate spots; a subapical spot and six terminal spots. Hind wing semihyaline white, the veins and margins fuscous, the fuscous on termen rather diffused and angled inwards below vein 2.

Hab. Costa Rica, Juan Vinas (*Schaus*), 1 ♂. *Exp.* 42 millim.

*1115 *b*. Eucereon moeschleri. (Plate XIX. fig. 16.)

Eucereon moeschleri, Roths. Nov. Zool. xix. p. 178 (1912).

♂. Head and thorax ochreous brown; palpi with lateral streak and the 3rd joint dark brown; vertex of head with brown patch; tegulæ and patagia with brown streaks, the latter with the edges dark towards base; abdomen yellow with dorsal triangular brown patch on basal half followed by a series of spots, lateral series of spots, the ventral surface white with the two terminal segments brown Fore wing ochreous brown, the interspace whitish except on inner area; elongate subbasal blackish marks below costa and cell; an elongate antemedial mark on costa and small spots below the cell and above and below vein 1; two elongate spots in middle of cell and two in end of cell, the upper one oblique; a patch on costa above end of cell, small spots above and below base of vein 6, two elongate spots beyond lower angle of cell, a triangular spot below end of cell with an oblique series of three spots from it to above inner margin; a subterminal series of elongate spots, the spots below veins 5 and 4 smaller; a terminal series of elongate spots, the spot in submedian interspace double. Hind wing semihyaline brownish white, the veins browner; the termen browner with rather triangular marks from apex to below vein 2.

Hab. Jamaica, type † ♂ in Coll. Rothschild. *Exp.* 40 millim.

*1117 *a*. Eucereon amazona. (Plate XIX. fig. 17.)

Eucereon confusum, amazonum, Roths. Nov. Zool. xix. p. 178 (1912).

♂. Head and thorax olive-brown; antennæ with the branches blackish; palpi at sides and lower part of frons blackish; vertex of head with blackish spot; tegulæ and patagia with black stripes; mid tibiæ with blackish streak; abdomen yellow, a dorsal triangular dark brown patch on basal half and blackish streak on three following segments expanding triangularly at the incisions, the anal segment blackish, a small dorsal tuft of yellow scales at base, the ventral surface whitish with the two terminal segments brown. Fore wing pale olive-brown; subbasal black streaks below costa and cell and a curved mark above inner margin; antemedial black spots below the cell and above vein 1; a large elliptical black spot in middle of cell with elongate mark above it on costa; two large conjoined spots in end of cell confluent with an elongate mark on costa, a spot above vein 6, large spot beyond the cell, two elongate spots beyond lower angle of cell and a large spot below end of cell with three obliquely placed spots between it and inner margin; a subterminal series of ten elongate spots, oblique below vein 3; a subapical spot with slight streak above it, five rather triangular spots just before termen between veins 7 and 2 and a larger spot in submedian interspace. Hind wing semihyaline white, the costa, inner margin, and cilia to vein 3 brown.

♀. Hind wing with the terminal area suffused with fuscous brown with irregular inner edge.

Hab. Surinam, Marœwym Valley, Arœwarwa Creek (*Klages*); Brazil, Amazons, Fonte Boa (*Klages*), type †♂, ♀ in Coll. Rothschild. *Exp.* ♂ 38, ♀ 40 millim.

1117 *b*. Eucereon confinis.

Charidea confinis, Herr.-Schäff. Aussereur. Schmett. f. 277 (1855).

♂. Head and thorax grey and white; antennæ black with some white on shaft towards base and tips; palpi and lower part of frons black; vertex of head with black patch, some yellow behind the eyes; tegulæ with dorsal and lateral black stripes; patagia edged with black; pectus black and white; legs black streaked with white; abdomen yellow, a large dorsal triangular black-brown patch followed by a black dorsal streak and segmental lines, the anal segment black, the ventral surface white with the extremity black. Fore wing white, the veins, discal and submedian folds streaked with fuscous; elongate subbasal black marks below costa and cell and a curved mark above inner margin; antemedial spots below the cell and above vein 1; an elliptical spot in middle of cell with elongate mark above it on costa; two conjoined spots in end of cell with an elongate mark above it on costa, spots above base of vein 6 and beyond the discocellulars, two elongate spots beyond lower angle of cell, and a large elongate spot below

end of cell with an oblique series of three spots between it and inner margin; a subterminal series of ten spots, larger towards costa, the series incurved below vein 3 and the spot below vein 3 elongate; a subapical spot with streak above it on costa; four rather quadrate terminal spots between veins 7 and 3 and a larger patch in submedian interspace; cilia blackish beyond the spots and towards tornus. Hind wing semihyaline white, the costa and inner margin black-brown; the termen narrowly black-brown expanding into slight wedge-shaped marks at veins 5 and 2; cilia black-brown, white at tips at middle.

Hab. Brazil; S.E. Peru, Oconeque (*Ockenden*), 1 ♂. *Exp.* 48 millim.

1117. Eucereon carolina. (Plate XIX. fig. 18.)

Nelphe carolina, H. Edw. Ent. Am. ii. p. 166 (1887).
Galethalea confinis, Druce, Biol. Centr.-Am., Het. i. p. 80; Hmpsn. Cat. Lep. Phal. B.M. i. p. 508; Dyar, Cat. Lep. N. Am. p. 77 (nec Herr.-Schäff.).
Eucereon cubensis, Schaus, Trans. Am. Ent. Soc. xxx. p. 136 (1904).
Eucereon confusum, Roths. Nov. Zool. xix. p. 178 (1912).

Hab. U.S.A., Florida, Indian R.; Mexico, Orizaba (*Flork*), 1 ♀, Jalapa (*Schaus*); Guatemala, San Geronimo (*Champion*), 1 ♂, 2 ♀, Guatemala City (*Rodriguez*), 1 ♂, 1 ♀; Costa Rica, Candelaria Mts. (*Underwood*), 1 ♂, 1 ♀, Godman-Salvin Coll., San José (*Underwood*); Panama, Chiriqui, type ♂ *confusum* in Coll. Rothschild; Cuba, Matanzas (*Schaus*), type † ♂ *cubensis* in U.S. Nat. Mus.; Colombia, Popayan (*Lehmann*); Venezuela, Caracas, Merida (*Briceno*); Argentina, Tucuman (*Steinbach, Monetti*). *Exp.* ♂ 40, ♀ 48 millim.

Egg. Dyar, Pr. U.S. Nat. Mus. xxiii. p. 262 (1900).

Two-thirds of a sphere, rounded, smooth, white translucent with a greenish tinge; reticulations slight, irregularly hexagonal.

Larva. Stage I. Head slightly bilobed, whitish; ocelli black; mouth brown; body white, the tubercles slightly greyish; setæ pale; hairs black with pale tips.

Stage II. Greenish yellow; hairs black and white.

Stage III. Body pale yellow with black dorsal line on somites 3 to 12 broken at ends.

Stage IV. Body with olive-black dorsal band widening at middle of somites; a yellow subdorsal line; hair mostly white.

Stage V. Head black; body dorsally black, ventrally pale greenish; warts flesh-colour; hair black mixed with grey and white, the long hairs at ends of body white on apical third; spiracles white.

Cocoon on a leaf, elliptical. Food-plants, *Philibertia viminalis* and *Vincetoxicum palustre*.

1119. Eucereon ochrota. (Plate XIX. fig. 19.)

Eucereon ochrota, Hmpsn. A. M. N. H. (7) xv. p. 431 (1905).
Eucereon guacolda, Hmpsn. Cat. Lep. Phal. B.M. i. p. 509 (part.), nec Poey.

Hab. Jamaica (*Martin*), 1 ♂, 1 ♀ type. *Exp.* 40 millim.

1119 *a*. Eucereon guacolda.

Erithales guacolda, Poey, Cent. Lep. Cuba, pl. 14 (1832).

Head and thorax brownish grey; palpi, sides of frons, tegulæ, patagia, and metathorax with black spots; neck with orange ring; legs banded with black; abdomen orange with dorsal series of black spots and black lateral line, the ventral surface ochreous. Fore wing brownish grey with whitish patch in end of cell, streaks above and below submedian fold and above base of veins beyond the cell and patches on termen; three small subbasal black spots with two beyond them in submedian interspace; an antemedial series of five spots oblique from costa to submedian fold where it is angled; two spots in end of cell and one below end; three oblique placed spots beyond the cell from costa to above vein 3, with one beyond them above vein 4; two obliquely placed postmedial spots below costa, four obliquely placed from costa near apex to vein 5 and five nearer termen from vein 5 to inner margin; a terminal series. Hind wing fuscous, the basal half whitish to below cell.

Hab. Cuba, Baracoa, 1 ♂, Santiago, 1 ♀ (*Schaus*). *Exp.* ♂ 28, ♀ 34 millim.

1119 *b*. Eucereon inconspicua. (Plate XIX. fig. 20.)

Eucereon inconspicuum, Lathy, Entom. xxxii. p. 120 (1899).

♀. Head and thorax grey; palpi blackish at sides; back of head orange; coxæ orange; tibiæ and tarsi blackish; abdomen orange with some slight dorsal and lateral black points, the last two segments and last three on ventral surface black. Fore wing ochreous grey; subbasal and medial ill-defined fuscous lines very acutely angled below the cell and connected by some fuscous on inner margin; some ill-defined spots in and beyond end of cell; a postmedial band composed of dentate patches, angled at vein 6, then oblique, ill-defined on inner side; a terminal series of elongate marks in the interspaces. Hind wing dark fuscous, somewhat paler towards base.

Hab. Br. Guiana, Demerara, 1 ♀ type. *Exp.* 46 millim.

*1121 *a*. Eucereon lerioides. (Plate XIX. fig. 21.)

Eucereon lerioides, Schaus, J. N.Y. Ent. Soc. ix. p. 44 (1901).

♀. Head grey; palpi black except towards base; vertex of head with black spot, back of head with yellow patches; thorax grey, the tegulæ with black spots at sides and extremity, the patagia edged with black, the prothorax with black spot; legs fuscous banded with white; abdomen yellow, lateral black stripes and the terminal segment black. Fore wing white mostly suffused with brownish grey; the veins yellowish; the base white followed by a triangular black patch on costa excurved at extremity to vein 1; an antemedial series of black spots becoming large and confluent towards costa, the one above inner margin an oblique striga; a

medial oblique series of spots, large and irregular on costal half, the spots on discocellulars and below angle of cell semicircular, small elongate spots beyond angles of cell; a subterminal series of large irregular black patches in the interspaces; some irregular spots on and before termen leaving a white spot at apex and with a larger spot at tornus; all these black markings edged by yellowish. Hind wing pale grey.

Hab. Mexico, Jalapa, type † ♀ in U.S. Nat. Mus. *Exp.* 38 millim.

*1121 *b*. **Eucereon parambæ.** (Plate XIX. fig. 22.)

Eucereon parambæ, Roths. Nov. Zool. xix. p. 178 (1912).

♂. Head and thorax grey; palpi with black marks at sides of 2nd and 3rd joints; antennæ blackish; vertex of head and tegulæ with blackish spots, the patagia blackish at sides; neck with yellow ring; legs ochreous white suffused with brown; abdomen yellow, the anal segment black, the ventral surface ochreous white. Fore wing white tinged in parts with brown; subbasal blackish spots below costa, cell, and vein 1 and a spot further from base above vein 1; an antemedial series of five spots conjoined on costal half; a small spot in middle of cell; conjoined spots in and beyond the end of cell, on costa above end of cell, and beyond and below lower angle with three small spots between them and inner margin; a postmedial series of spots, conjoined to vein 5 and incurved below vein 3; subterminal and terminal series of spots from costa to vein 3 and a bifid spot in submedian interspace. Hind wing brown, the interspaces rather paler except towards termen.

Hab. Ecuador, Paramba (*Flemming*), type † ♂ in Coll. Rothschild. Lita (*Flemming*), Quevedo (*Buchwald*). *Exp.* 36 millim.

*1121 *c*. **Eucereon buchvaldi.** (Plate XIX. fig. 23.)

Eucereon buchwaldi, Roths. Nov. Zool. xix. p. 179 (1912).

♂. Head and thorax whitish; antennæ and palpi fuscous brown; back of head with some yellow; tegulæ with brown spots at tips and sides; patagia edged with brown; legs suffused with brown; abdomen yellow, the anal tuft blackish. Fore wing white suffused with pale brown; a subbasal fuscous brown patch from costa to submedian fold and spots above and below vein 1; an antemedial elongate spot below costa and two in cell, and round spots defined by white below the cell and above vein 1; two spots in end of cell; a series of spots just beyond the cell, incurved below vein 3 and the three spots below vein 2 smaller and defined by white; a subterminal series of rather quadrate spots, incurved below vein 2, and the spot below vein 5 smaller; a subapical spot with elongate mark above it on costa, five terminal spots between veins 7 and 2 and a larger patch in submedian interspace. Hind wing semihyaline

whitish tinged with ochreous brown, the termen brown with diffused patches at apex and below vein 2.

Hab. W. Ecuador, Quevedo (*Buchwald*), type † ♂ in Coll. Rothschild. *Exp.* 28 millim.

*1121 *d.* **Eucereon hoffmannsi.** (Plate XIX. fig. 24.)

Apocerea hoffmannsi, Roths. Nov. Zool. xix. p. 170 (1912).

♂. Head and thorax grey-white, the back of head yellow; palpi, frons, and antennæ black, the last with the shaft white above towards base; tegulæ edged with black, the dorsum of thorax with black streak; legs black, the mid and hind femora and base of tibiæ with white streaks, the hind tibiæ at extremities and tarsi with some white; abdomen yellow, the extremity and sides black, the ventral surface white except terminal segments, the 5th segment with black band, the extremity of anal tuft white. Fore wing white, the veins streaked with black; the costal edge black towards base and the base of inner area black; an oblique antemedial shade from costa and oblique line from submedian fold to inner margin; a blackish discoidal patch extending to costa and to below angle of cell; an oblique line from submedian fold to middle of inner margin; a sinuous postmedial shade from costa to vein 5 and a line from vein 3 to inner margin somewhat angled inwards at vein 2; an oblique blackish shade across apical area, patch on middle of termen, and bar from vein 3 to tornus. Hind wing semihyaline white, the inner area tinged with brown; the termen blackish emitting short streaks on the veins.

Hab. Venezuela, Caura R., Maripa; Brazil, Amazons, R. Madeira, Allianca (*Hoffmanns*), type † ♂ in Coll. Rothschild. *Exp.* 36 millim.

1121 *e.* **Eucereon zephyrus.** (Plate XIX. fig. 25.)

Eucereon zephyrum, Schaus, A. M. N. H. (8) vi. p. 194 (1910).

♂. Head white, the frons with slight fuscous spots at middle and above, the back of head with pair of yellowish white patches; palpi black except at base; antennæ black; thorax white mixed with greyish fuscous; legs blackish streaked with white; abdomen pale yellow, greyish at base, then with fuscous dorsal streak, the anal tuft grey and fuscous, the ventral surface white and blackish. Fore wing white, the veins, discal and submedian folds streaked with fuscous, the basal half of costal edge blackish; a fuscous spot above vein 1 before the antemedial line, which is fuscous, strongly excurved in cell and slightly below submedian fold; a slight fuscous discoidal lunule; postmedial line fuscous, slightly angled outwards below costa, excurved at middle, then strongly bent inwards and angled outwards at vein 1; subterminal line represented by a diffused fuscous band from costa to vein 5 and a band from vein 3 to inner margin bent inwards at vein 2; a fuscous line just

before termen from costa to below vein 5, then a blackish bar on termen to vein 3. Hind wing semihyaline white, the apical area suffused with fuscous, the termen fuscous.

Hab. Costa Rica, Juan Vinas (*Schaus*), 1 ♂. *Exp.* 34 millim.

*1122 *a*. **Eucereon pagina**, n. n. (Plate XIX. fig. 26.)

Eucereon hoffmannsi, Roths. Nov. Zool. xix. p. 180 (1912), nec p. 170.

Head and thorax grey tinged with brown; antennæ and palpi behind dark brown; patagia edged with brown; legs brown; abdomen dark brown, the extremity yellow, the ventral surface brownish white with brown segmental lines on terminal half. Fore wing brownish white, the veins, discal fold in end of cell, and submedian fold streaked with brown; traces of an oblique brownish subbasal line; antemedial line brown, rather diffused towards costa, angled inwards at median nervure and outwards in submedian fold; a rather quadrate brown discoidal patch conjoined to a spot on costa from the outer edge of which arises the postmedial line, strongly excurved between veins 5 and 3, then oblique to the submedian fold where it is angled inwards to the antemedial line, then angled outwards at vein 1; subterminal line brown, excurved and forming a patch at vein 6, excurved at middle and angled inwards at vein 2 to near the postmedial line; an oblique maculate subapical brown bar from costa to vein 6 and a small spot at extremity of vein 4. Hind wing semihyaline brownish white, the termen suffused with brown except towards tornus.

Hab. Ecuador, Paramba, Quevedo (*Buchwald*); Peru, Huanuco, Pozuzu (*Hoffmanns*), type † ♂ in Coll. Rothschild. *Exp.* 40 millim.

*1123 *a*. **Eucereon mathani**. (Plate XIX. fig. 27.)

Eucereon mathani, Schaus, J. N.Y. Ent. Soc. ix. p. 44 (1901).
Eucereon fuscatum, Roths. Nov. Zool. xix. p. 176 (1912).

♂. Head and thorax brown; palpi yellowish in front; back of head with two yellow spots; abdomen black-brown, the extremity yellow, the ventral surface yellow with brown segmental lines. Fore wing grey almost entirely suffused with brown leaving the lines and veins grey; a subbasal line from costa to vein 1 angled outwards in cell; a curved antemedial line angled outwards in and below the cell; orbicular and reniform stigmata large, dark brown defined by grey and open above, the former round, the latter divided up by the pale veins, an oblique waved line from it to inner margin, and some whitish between its upper portion and the curved waved postmedial line which is joined at vein 3 by another waved line excurved between veins 7 and 5; a highly crenulate subterminal line; cilia yellowish white at apex and towards tornus. Hind wing pale suffused with fuscous especially on terminal area.

Underside fuscous brown; fore wing with white patches before and beyond the reniform.

Hab. Ecuador, Bolivar, Balzapamba (*M. de Mathan*), type † ♂ in U.S. Nat. Mus., Chimbo (*Rosenberg*), type † ♂ *fuscatum* in Coll. Rothschild. *Exp.* 36 millim.

*1123 *b*. **Eucereon ino.** (Plate XIX. fig. 28.)

Eucereon ino, Druce, A. M. N. H. (7) v. p. 508 (1900).

♂. Head and thorax pale brown; antennæ fuscous brown; abdomen fuscous brown, the extremity yellow, the ventral surface pale. Fore wing pale brown; the veins dark; oblique straight dark antemedial and medial lines; traces of a diffused sinuous subterminal band. Hind wing semihyaline whitish; the veins brown; the terminal area tinged with brown.

Fore wing with vein 6 from well below angle of cell; the termen straight and oblique.

Hab. Colombia, Valparaiso (*H. H. Smith*), type † ♂ in Coll. Joicey. *Exp.* 36 millim.

*1124 *a*. **Eucereon pseudocasca.** (Plate XIX. fig. 29.)

Eucereon pseudocasca, Roths. Nov. Zool. xix. p. 174 (1912).

♂. Head black with two yellow spots behind; palpi with some yellow at base; thorax blackish and grey, the patagia edged with yellow, the metathorax with white patch; pectus and legs black, the femora and tibiæ streaked with whitish; abdomen black, the anal tuft at base and sides yellow, the basal half of ventral surface white. Fore wing whitish, the costa and veins beyond the cell streaked with yellow; the subbasal area black-brown from costa to above inner margin, interrupted by pale streaks on the veins and in submedian fold; an antemedial series of slight black-brown marks from costa to median nervure; the medial area with black-brown streaks below costa, above and below basal half of vein 2, and from submedian fold to inner margin; a large lunulate black-brown discoidal patch extending from costa to below end of cell, broken up by the yellow streaks on the veins; two postmedial spots above inner margin; the apical area black-brown to below vein 3, broken up by the yellow streaks on the veins and traversed by the whitish subterminal line which is angled outwards at vein 6 and bent outwards to termen at submedian fold; two black-brown subterminal spots above tornus. Hind wing semihyaline whitish, the inner area tinged with brown, the terminal area fuscous brown, broad at costa, narrowing to tornus, its inner edge irregular; a dark mark on upper discocellular; the underside with the costal area suffused with fuscous brown.

♀. Abdomen with the extremity of penultimate and base of anal segment yellow.

Hab. Peru, Carabaya, S. Domingo (*Ockenden*), type † ♂, ♀ in Coll. Rothschild. *Exp.* 36 millim.

*1125 *a*. Eucereon tenellula. (Plate XIX. fig. 30.)

Eucereon tenellulum, Schaus, A. M. N. H. (8) vi. p. 195 (1910).

♀. Head and thorax grey-brown, the back of head with pair of yellow spots, the upper edge of patagia with yellow streaks; fore coxæ and the femora streaked with whitish; abdomen brown, pale at base, the extremity yellow, the basal half of ventral surface white. Fore wing with the basal half with diffused fuscous and yellowish streaks in the interspaces and a fuscous spot at middle of costa; a fuscous shade from costa to inner margin at end of cell; the veins beyond lower angle of cell yellower; a white postmedial line expanding into a patch from below costa to vein 5, angled inwards at vein 2 and ending at tornus; the terminal area fuscous with rather diffused white subterminal line, angled inwards at vein 5 and ending on termen at vein 2. Hind wing white, the termen suffused with brown forming large patches at apex and vein 2; the underside with the costal area suffused with brown.

Hab. Costa Rica, Juan Vinas (*Schaus*), type † ♀ in U.S. Nat. Mus. *Exp.* 34 millim.

1126. Eucereon scyton, insert (syn.) :—

Eucereon mizar, Druce, A. M. N. H. (7) iii. p. 231 (1899).

Ecuador, Sarayacu (*Buckley*), type † ♀ in Coll. Joicey.

1126 *a*. Eucereon flavicincta. (Plate XIX. fig. 31.)

Eucereon flavicincta, Schaus, Pr. U.S. Nat. Mus. xxix. p. 192 (1905).

♀. Head and thorax black-brown and whitish; palpi whitish at base and tips; back of head with paired white spots; tegulæ whitish at tips; patagia with whitish patches; metathorax white bisected by a black line; legs banded black and white; abdomen black with yellow band on penultimate segment, the ventral surface with the 1st three segments white and a white band on penultimate segment. Fore wing grey-white, the veins and a streak in submedian fold black; some blackish at base of costa and inner margin; antemedial line oblique from subcostal nervure to submedian fold, then incurved and bent outwards to inner margin; a black annulus in middle of cell with fine streak before it and more prominent oblique streak from it to lower part of the black-defined discoidal lunule; postmedial line bent outwards below costa, incurved at discal fold, excurved to vein 3, then very strongly incurved and bent outwards to inner margin, another waved line beyond it, excurved from costa to vein 2, then incurved; some short streaks in the interspaces before termen and spot in submedian fold; some lunules on termen below apex and between veins 5 and 3; a fine line on apical part of termen. Hind wing pale tinged with fuscous; the veins fuscous; the terminal area suffused with fuscous.

Hab. Peru, Carabaya, type † ♀ in U.S. Nat. Mus.; La Oroya (*Ockenden*), 1 ♀. *Exp.* 34 millim.

*1126 *b*. **Eucereon ignota.** (Plate XIX. fig. 32.)

Eucereon ignota, Druce, A. M. N. H. (7) xviii. p. 80 (1906).

♀. Head and thorax white tinged with brown; palpi brown, whitish at base; lower part of frons brown; antennæ pale brown; tegulæ and patagia except at extremity pale brown; pectus and legs brown, the fore legs with some whitish, the mid and hind tibiæ and basal joint of tarsi with whitish rings; abdomen brown, the ventral surface with the basal half white. Fore wing white tinged with brown in parts; a waved brown antemedial line, angled inwards in cell and submedian fold; a brown annulus in middle of cell, an irregular brown discoidal patch with whitish centre, strongly constricted at middle and connected at upper and lower extremities with the waved postmedial line, which is excurved below costa, then incurved, bent outwards at vein 5, then very oblique and bent outwards to inner margin, another waved line beyond it, slightly bent outwards below vein 5, then very oblique and bent outwards to inner margin; a dentate subterminal line from costa to vein 3 and a diffused oblique bar from vein 2 to tornus; a brown terminal line from apex to vein 5. Hind wing white, the terminal area suffused with brown, broadly at costa, narrowing to a point at submedian fold; the underside with the costal area brown, narrowing to base.

Hab. Peru, S. Domingo (*Ockenden*), type † ♀ in Coll. Joicey. *Exp.* 34 millim.

*1126 *c*. **Eucereon albinota.** (Plate XX. fig. 1.)

Eucereon albinota, Dogn. Hét. Nouv. Am. Sud, i. p. 5 (1910).

♀. Head, thorax, and abdomen black-brown; palpi yellow at base; back of head with yellow spot; tegulæ white at base, the metathorax with whitish spot; fore coxæ and hind femora white; abdomen with the extremity yellow, the ventral surface with yellow bands. Fore wing black-brown; some white at base and a yellow mark below costa; a slight yellow streak above median nervure; a short streak below base of cell forming a fork with a streak above vein 1 ending in a wedge-shaped white antemedial patch; a short yellow streak below middle of costa; the veins beyond the cell slightly streaked with yellow; a postmedial yellow spot below the costa conjoined to a quadrate white patch between veins 7 and 4, a bidentate yellow line arising from its lower outer angle and extending to vein 2. Hind wing white, the costal area fuscous brown, the terminal area fuscous brown narrowing to a point at tornus.

Hab. Colombia, San Antonio (*Fassl*), type † ♀ in Coll. Dognin. *Exp.* 36 millim.

*1126 *d*. **Eucereon fuscobrunnea.** (Plate XX. fig. 2.)

Eucereon fuscobrunneum, Roths. Nov. Zool. xix. p. 177 (1912).

♂. Head and thorax red-brown with a greyish tinge; antennæ black-brown; abdomen black-brown, the extremity yellow, the ventral surface red-brown with a greyish tinge. Fore wing red-brown with a slight greyish tinge; antemedial line darker brown, rather diffused, very oblique inwardly below the cell; a rather darker patch beyond the cell, bounded by the very indistinct post-medial line which is defined on outer side by pale suffusion, excurved to vein 4, then incurved; a faint diffused pale subterminal line, ending on termen at vein 3. Hind wing dark reddish brown, the lower part of cell and area just below and beyond it semihyaline. Underside greyer brown.

Hab. Ecuador, Paramba (*Rosenberg*), type † ♂ in Coll. Rothschild. *Exp.* 28–32 millim.

*1127 *a*. **Eucereon intranotata.** (Plate XX. fig. 3.)

Eucereon intranotatum, Dogn. Ann. Soc. Ent. Belg. xliv. p. 436 (1900).

♀. Head and thorax fuscous; frons yellowish white above; vertex of head with two orange patches; patagia orange at shoulders and on upper side; prothorax with two slight yellowish streaks; abdomen greyish fuscous, the ventral surface with whitish bands on basal half. Fore wing fuscous with yellowish white streaks in the interspaces except beyond end of cell; a postmedial rather oblique elliptical yellowish white patch between veins 7 and 4. Hind wing pale, thinly scaled, the terminal area darker.

Hab. Ecuador, Loja, type † ♀ in Coll. Dognin. *Exp.* 30 millim.

1127 *b*. **Eucereon venosa.** (Plate XX. fig. 4.)

Eucereon venosa, Schaus, A. M. N. H. (8) vi. p. 195 (1910).

♀. Head and thorax fuscous grey; palpi, frons, and antennæ blackish, the back of head with pair of yellow spots; patagia with yellow streaks; abdomen fuscous grey, the ventral surface white except towards extremity. Fore wing whitish with fuscous streaks on the veins, in cell, and submedian fold, a diffused fuscous discoidal patch with rounded white patch beyond it between veins 8 and 4; a fuscous subterminal band, broad towards costa, excurved round outer edge of the white patch, then narrowing and ending at vein 2; the termen fuscous from apex to vein 3, expanding somewhat at apex. Hind wing whitish suffused with fuscous grey, the terminal area darker; the underside whitish, the costal area and terminal area to submedian fold suffused with fuscous.

Hab. Costa Rica, Juan Vinas (*Schaus*), 1 ♀. *Exp.* 28 millim.

1128 *a*. Eucereon brunnea. (Plate XX. fig. 5.)

Teucer brunnea, Hmpsn. A. M. N. H. (7) xi. p. 341 (1903).
Eucereon fuscoirroratum minus, Roths. Nov. Zool. xix. p. 177 (1912).

♂. Dull reddish brown; neck with orange ring; tarsi with pale ring; abdomen with orange subdorsal spots on 5th, 6th and 7th segments and white sublateral fasciæ. Fore wing with slight discoidal point on a very obscure medial dark band angled at lower angle of cell; an indistinct pale dentate subterminal line.

Hab. Venezuela, Caura Valley (*Klages*), 1 ♂; Brazil, Amazons, R. Madeira, Allianca (*Hoffmanns*), type † ♂ *minus* in Coll. Rothschild; Argentina, Goya (*Perrens*), 1 ♂ type. *Exp.* 26 millim.

*1128 *b*. Eucereon birchelli. (Plate XX. fig. 6.)

Eucereon birchelli, Druce, A. M. N. H. (7) vii. p. 74 (1901).

♀. Yellowish brown irrorated with dark brown; abdomen fuscous above, pale brownish below. Fore wing with traces of fuscous antemedial line angled outwards below costa, then oblique; a prominent black discoidal point; some indistinct subterminal points on costal half. Hind wing fuscous brown with black discoidal point.

Hab. Colombia, Bogotá (*Birchell*), type † ♀ in Coll. Joicey. *Exp.* 34 millim.

*1128 *c*. Eucereon fuscoirrorata. (Plate XX. fig. 7.)

Eucereon fuscoirroratum, Roths. Nov. Zool. xix. p. 177 (1912).

♂. Head and thorax dark red-brown mixed with some greyish; antennæ white above at tips; palpi whitish in front and at extremity of 2nd joint; coxæ and streaks on femora and tibiæ whitish, the tarsi fuscous ringed with whitish; abdomen fuscous brown with sublateral whitish streaks. Fore wing greyish very thickly striated with chocolate-brown; an obscure dark antemedial patch on costa; a dark discoidal point; an indistinct pale post-medial patch from costa to discal fold; a subterminal series of small whitish spots, excurved below vein 7 and at middle. Hind wing dark red-brown with a blackish discoidal point; the underside with the lower part of cell and area just below and beyond it paler.

Hab. Venezuela, Caura R., La Union (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 24–26 millim.

*1128 *d*. Eucereon irrorata. (Plate XX. fig. 8.)

Eucereon irrorata, Schaus, Trans. Ann. Ent. Soc. xxx. p. 136 (1904).

♂. Head whitish, the antennæ and vertex brown; neck with orange ring; thorax brown with white stripes on shoulders; mid

and hind tibiæ and tarsi whitish; abdomen blackish brown, grey at base. Fore wing dull brown rather sparsely irrorated with small black-brown spots; a discoidal point; a diffused postmedial band almost obsolete except from vein 4 to inner margin where it is oblique. Hind wing greyish fuscous with a slight purplish gloss.

Hab. Cuba, type † ♂ in U.S. Nat. Mus. *Exp.* 34 millim.

*1128 *e*. **Eucereon strix.** (Plate XX. fig. 9.)

Eucereon strix, Roths. Nov. Zool. xix. p. 176 (1912).

♂. Head, thorax, and abdomen dark red-brown with some ochreous at base of tegulæ; the hind femora at base and extremities and tibiæ at base yellowish white, the ventral surface of abdomen yellowish white banded with brown. Fore wing ochreous suffused with red-brown and thickly striated with dark red-brown, the apical area dark brown, the veins with dark brown streaks; a subbasal patch of dark red-brown suffusion from costa to submedian fold; antemedial line black-brown, forming a patch at costa, then inwardly oblique and sinuous to vein 1 where it terminates; a slight blackish discoidal spot; postmedial line black-brown, defined on outer side by yellowish white towards costa, somewhat dentate at the veins, oblique to vein 4, then very strongly incurved; subterminal line indistinct, yellowish white, somewhat maculate, ending on termen at submedian fold, with some black-brown marks beyond it and a yellowish white apical spot. Hind wing semihyaline reddish brown, the terminal area suffused with dark brown expanding at apex and below vein 2. Underside of fore wing red-brown with white mark in cell towards extremity, the postmedial line defined on each side by white from costa to vein 3.

Hab. Colombia, San Cajetano, type † ♂ in Coll. Rothschild. *Exp.* 44 millim.

*1128 *f*. **Eucereon resina.** (Plate XX. fig. 10.)

Eucereon resina, Druce, A. M. N. H. (7) v. p. 508 (1900).

♀. Head and thorax grey mixed with brown; legs banded fuscous and whitish; abdomen fuscous with ochreous line on penultimate segment and the ventral surface mostly ochreous. Fore wing grey strongly irrorated with brown; an indistinct antemedial line dentate outwards below costa and on median nervure and inwards in cell and on vein 1; a diffused black annulus in middle of cell; the discocellulars defined by black, two short black streaks in angles of cell and two small wedge-shaped spots beyond lower angle; the postmedial line blackish with whitish spots on its inner side, two prominent black dentitions below costa, then strongly waved to vein 2 where it is bent inwards to below end of cell, then with black

dentitions to inner margin; a strongly dentate terminal black line. Hind wing fuscous, paler towards base and inner margin; cilia whitish at tips. Underside fuscous; both wings with white spot in end of cell and a postmedial series excurved at vein 5 then obsolescent; fore wing with a spot above vein 6 before the postmedial series.

Hab. Colombia, S. del Libane, 6000′ (*H. H. Smith*), type † ♀ in Coll. Joicey. *Exp.* 42 millim.

1130. **Eucereon lineata**, insert (syn.):—

Eucereon testaceum, Druce, A. M. N. H. (7) vi. p. 65 (1900).

Venezuela, Merida, type † in Coll. Joicey.

1130 *a*. **Eucereon chlorænoma**, n. n. (Plate XX. fig. 11.)

Eucereon ockendeni, Roths. Nov. Zool. xix. p. 180 (1912), nec Druce, 1906.

Head, thorax, and abdomen white tinged with red-brown, the last with red-brown segmental lines on terminal half and ventral surface; antennæ blackish; palpi brown; legs streaked with red-brown. Fore wing semihyaline whitish, the veins streaked with dark brown; a subbasal red-brown patch on costal area with diffused line from it to vein 1; antemedial line red-brown, forming a spot at costa, then inwardly oblique and sinuous; a dark brown bar across end of cell and some brown suffusion beyond the discocellulars; postmedial line brown, forming a small patch at costa, excurved below costa, very oblique and sinuous below vein 4; subterminal line brown, forming a small patch at costa, excurved and forming a patch at vein 6, incurved at vein 5, then oblique, sinuous, and forming a patch at inner margin; a diffused sinuous line before termen from costa to vein 6, between veins 5 and 8 and a spot below vein 2. Hind wing semihyaline white, the termen slightly tinged with brown towards apex and below vein 2.

Hab. Venezuela, Caracas, Caura R., La Union (*Klages*); Ecuador, Paramba (*Rosenberg*), Lita (*Flemming*); Peru, R. Inambari, La Oroya (*Ockenden*), type † ♂ in Coll. Rothschild, S. Domingo (*Ockenden*), 1 ♂. *Exp* 40–44 millim.

1131 *a*. **Eucereon zizana**. (Plate XX. fig. 12.)

Eucereon zizana, Dogn. Ann. Soc. Ent. Belg. xli. p. 24 (1897).
Eucereon carabayana, Schaus, Pr. U.S. Nat. Mus. xxix. p. 191 (1905).

Head and thorax rusty brown mixed with grey; frons tinged with blue; fore legs tinged with blue, the coxæ and femora with some white; abdomen rusty brown, the basal area greyish. Fore

wing grey irrorated with brown; a rusty brown patch at base of costa; an antemedial slightly waved band; a discoidal patch rather constricted at middle and extending to costa; the postmedial line arising from it, oblique to vein 5, then strongly incurved and slightly excurved at vein 1; subterminal band oblique from costa to vein 6, interrupted between veins 5 and 4, angled inwards at vein 2; some diffused conjoined spots just before termen between apex and vein 4 and another at vein 2. Hind wing white, the costal area and termen to vein 2 fuscous brown.

Hab. W. Colombia, San Antonio (*Palmer*), 2 ♂; Ecuador, Loja, type † ♂ in Coll. Dognin; Peru, Carabaya, 1 ♂, type † ♂ *carabayana* in U.S. Nat. Mus., Oconeque (*Ockenden*), 1 ♂; Bolivia, La Paz, R. Tanampaya (*Garlepp*), 1 ♀. *Exp.* 32–44 millim.

*1131 *b*. Eucereon cœruleocaput. (Plate XX. fig. 13.)

Eucereon cœruleocaput, Roths. Nov. Zool. xix. p. 180 (1912).

♀. Head dark purple-brown suffused with metallic blue and with some grey behind; antennæ and palpi blackish; thorax grey-white, the patagia edged with purple-brown, a slight brown dorsal streak; pectus and legs purple-brown, the former with whitish patches, the femora with white stripes; abdomen purple-brown, the first three and terminal segments white edged with brown on ventral surface. Fore wing white irrorated with purple-brown; the basal area purple-brown except at inner margin; the veins streaked with brown; an antemedial purple-brown patch on costa with traces of a curved line arising from it expanding into small spots at median nervure and vein 1; a purple-brown patch in middle of cell and patches on costa at end of cell and at lower angle of cell conjoined by a discoidal bar; postmedial line diffused purple-brown, arising from the outer edge of the costal patch, excurved beyond the cell, then strongly incurved; subterminal line diffused purple-brown, expanding into small patches at costa and vein 6 and into a large patch from vein 3 to inner margin, angled inwards at vein 5 and incurved below vein 3; conjoined subapical purple-brown spots below costa and vein 7, a spot at middle of termen, and a spot above tornus; cilia brown. Hind wing semihyaline white, the apical area and termen except towards tornus suffused with dark brown.

Hab. Peru, Carabaya, Oconeque (*Ockenden*), type † ♀ in Coll. Rothschild, S. Domingo (*Ockenden*), Huanuco, Cushai (*Hoffmanns*). *Exp.* 48 millim.

*1131 *c*. Eucereon nervula. (Plate XX. fig. 14.)

Eucereon nervulum, Roths. Nov. Zool. xix. p. 179 (1912).

♀. Head and thorax dark brown; antennæ blackish with a bluish gloss between their bases; patagia and metathorax with

greyish stripes; abdomen dark brown, the basal half of ventral surface white. Fore wing brownish white, the veins and submedian fold with red-brown streaks; the costal area red-brown at base; the medial costal area red-brown conjoined to diffused spots in middle of cell and on discocellulars; a diffused red-brown postmedial line arising at vein 5, excurved to vein 3, then incurved; a red-brown patch on costal area towards apex with the slight subterminal line arising from it, slightly angled inwards at vein 5, incurved below vein 3 and conjoined to diffused red-brown patches on terminal area below apex, at middle, and above tornus. Hind wing semihyaline whitish, the costal area towards apex and termen except towards tornus suffused with red-brown.

Hab. Ecuador, Paramba (*Rosenberg*), type † ♀ in Coll. Rothschilld, Sita (*Flemming*). *Exp.* 32 millim.

*1131 *d.* **Eucereon sordidescens.** (Plate XX. fig. 15.)

Eucereon sordidescens, Roths. Nov. Zool. xix. p. 179 (1912).

Head and thorax grey suffused with red-brown, the patagia with red-brown edges and the thorax with slight dorsal brown streak; antennæ and palpi blackish; legs and abdomen red-brown, the latter with the ventral surface whitish at base. Fore wing pale grey tinged with red-brown; the costal half of basal area red-brown; a diffused curved red-brown antemedial band; the medial costal area red-brown conjoined to a large diffused discoidal patch; the apical part of costal area red-brown with an oblique diffused subterminal band arising from it; a patch of red-brown suffusion on middle of terminal area. Hind wing semihyaline whitish tinged with red-brown especially on terminal area.

Hab. Venezuela, Merida (*Briceno*), type † ♂ in Coll. Rothschild; Peru, Carabaya, S. Domingo (*Ockenden*). *Exp.* 38 millim.

*1131 *e.* **Eucereon nubilosa.** (Plate XX. fig. 16.)

Eucereon nubilosum, Roths. Nov. Zool. xix. p. 179 (1912).

♀. Head and thorax dark purple-brown; antennæ blackish with a bluish gloss between their bases; metathorax greyish; abdomen dark purple-brown, the basal half of ventral surface white. Fore wing whitish irrorated with purple-brown; the basal area purple-brown; a large purple-brown patch on medial area from costa to median nervure with traces of an oblique antemedial line arising from its inner edge and a narrow oblique band from its outer edge to inner margin; apical and tornal areas purple-brown connected by an oblique diffused subterminal line; a rather triangular purple-brown mark at middle of terminal area. Hind wing semihyaline white; the costal area towards apex and the termen dark brown.

Hab. Colombia, Sta. Marta, Onaca (*Engelke*); Venezuela, Caracas; Peru, Carabaya, S. Domingo (*Ockenden*), type † ♀ in Coll. Rothschild. *Exp.* 26–30 millim.

1133 *a*. **Eucereon meruloides.** (Plate XX. fig. 17.)

Eucereon meruloides, Schaus, Pr. U.S. Nat. Mus. xxix. p. 192 (1905).

♂. Head, thorax, and abdomen dark leaden grey; palpi at sides, patagia and fore tibiæ streaked with black. Fore wing leaden grey, the veins, cell and submedian fold with black streaks; a slight diffused subterminal shade, excurved from costa to vein 5, then oblique; a fine black terminal line. Hind wing pale grey; the terminal area irregularly suffused with black expanding below apex and vein 2.

Hab. W. Colombia, San Antonio (*Pabner*), 1 ♂; Peru, Carabaya, type † ♂ in U.S. Nat. Mus., San Domingo (*Ockenden*), 1 ♂. *Exp.* 42 millim.

1133 *b*. **Eucereon apicalis.** (Plate XX. fig. 18.)

Halesidota apicalis, Wlk. vii. 1706 (1856); Kirby, Cat. Het. p. 211.

♀. Palpi, frons, and antennæ fuscous brown; vertex of head crimson; thorax and base of abdomen brownish ochreous; tibiæ above and tarsi fuscous; terminal part of abdomen tinged with crimson above, the anal tuft black. Fore wing brownish ochreous; a dark streak on medial part of inner margin; slight dark marks on discocellulars, above them on costa and on costa towards apex. Hind wing paler semihyaline.

Hab. Brazil, Castro Paraña, 1 ♀. *Exp.* 34 millim.

1134. **Eucereon alba**, insert (syn.):—

Hyaleucerea agylloides, Dyar, Pr. U.S. Nat. Mus. xlii. p. 50 (1912).

Mexico, Orizaba.

1134 *a*. **Eucereon vestalis.** (Plate XX. fig. 19.)

Theages vestalis, Schaus, P. Z. S. 1892, p. 278; id. Am. Lep. pl. 1. f. 23.

White tinged with pale blue-green; antennæ with the branches brownish; wings semihyaline.

Hab. Peru, 1 ♂; Paraguay, Sapucay (*Foster*), 6 ♂, 3 ♀. *Exp.* 30 millim.

*1135 *a*. Correbia tristitia.

Correbidia tristitia, Kaye, Entom. xliv. p. 145 (1911).
Correbia klagesi, Roths. Nov. Zool. xix. p. 183 (1912).

Fore wing of male with fringe of long hair from middle of inner margin.

♂. Head and thorax red-brown tinged with leaden grey; frons above and streaks from base of antennæ to shoulders fulvous yellow; palpi yellow, dark brown towards tips; antennæ dark brown; pectus and legs dark brown with yellow streaks below the wings, the fore coxæ, femora near base and tarsi banded with yellow; abdomen dark brown with fulvous yellow lateral stripes, the basal half of ventral surface yellow. Fore wing dark brown tinged with silvery leaden blue; a broad pale yellow subbasal band from costa to vein 1; a pale yellow band from costa beyond middle to tornal part of inner margin and termen, its edges slightly

Fig. 51.—*Correbia tristitia*, ♂. ½.

excurved below middle. Hind wing pale yellow with a short brown streak beyond lower angle of cell and terminal brown band slightly diffused on inner side; the underside with the costa yellower, a large round brown patch from middle of costa to median nervure.

Hab. Venezuela, Caura R. (*Klages*); Br. Guiana, Rockstone (*Kaye*), type † ♂ in Coll. Kaye; Surinam, Maroewym Valley, Aroewarwar Creek (*Klages*), type † ♂ *klagesi* in Coll. Rothschild; Brazil, Amazons, Fonte Boa, Codaljas, Iquitos. *Exp* 36 millim.

*1135 *b*. Correbia obscura. (Plate XX. fig. 20.)

Correbia obscura, Schaus, Pr. U.S. Nat. Mus. xxix. p. 193 (1905).

♂. Head, thorax, and abdomen black-brown; palpi at base and base of 3rd joint yellow; sides of head and shoulders with orange streaks; coxæ, base of femora, and 1st joint of tarsi yellow. Fore wing black-brown, the veins with slight metallic blue streak; a minute dull orange streak below base of costa; an erect, rather narrow postmedial band, orange at costa, yellow to median nervure, then dull orange. Hind wing fuscous brown, the inner area rather paler, the lower part of cell and area just below and beyond it

semihyaline; the underside with the inner half pale except costal area.

Hab. Fr. Guiana, Maroni R., type † ♂ in U.S. Nat. Mus. *Exp.* 22 millim.

1136 *a*. **Correbia minima.** (Plate XX. fig. 21.)

Correbia minima, Druce, A. M. N. H. (7) xv. p. 465 (1905).

♂. Head, thorax, and abdomen black-brown, sides of head, thorax and first four segments of abdomen with orange stripes; base of palpi, coxæ, parts of femora, base of tarsi, and first two segments of abdomen below orange. Fore wing black-brown; the basal area orange except inner margin; a broad postmedial orange band, its outer edges slightly angled outwards at lower angle of cell and expanding to near tornus below vein 2. Hind wing black-brown, the base and inner margin orange; the lower part of cell and area below it rather thinly scaled; the underside orange with medial black patch on costa; a terminal black band narrowing to a point at tornus.

Hab. Venezuela, Caura Valley (*Klages*), 3 ♂. *Exp.* 24 millim.

*1136 *b*. **Correbia felderi.** (Plate XX. fig. 22.)

Correbia felderi, Roths. Nov. Zool. xix. p. 182 (1912).

♂. Head and thorax black-brown; a yellow streak on back of head, tegulæ and patagia; palpi yellow except towards tips; coxæ and base of femora yellow; abdomen black-brown, small lateral yellow spots on two basal segments, the basal half of ventral surface yellow. Fore wing black-brown; some orange-yellow at base of costa; an orange-yellow postmedial band, interrupted below the cell. Hind wing dark brown, the lower part of cell and area just below it thinly scaled.

Hab. Brazil, Amazons, type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

1136. **Correbia lycoides**, insert (syn.):—

Correbia elongata, boliviana, Roths. Nov. Zool. xix. p. 181 (1912).

Bolivia, Buena Vista (*Steinbach*), type † ♀ in Coll. Rothschild.

1136 *c*. **Correbia elongata.** (Plate XX. fig. 23.)

Correbia elongata, Roths. Nov. Zool. xix. p. 180 (1912).

Head and thorax black-brown; a fulvous orange stripe on sides of frons, back of head, tegulæ and patagia; palpi orange below on

basal half; fore and mid coxæ and the base of femora with orange marks; abdomen black-brown with some orange at base of sides. Fore wing fulvous orange; the base black-brown; a black-brown streak on inner margin from base to the broad black-brown medial band which is interrupted by an orange streak on vein 1, its outer edge somewhat excurved below the cell; a large black-brown patch slightly glossed with bluish on apical area, extending to vein 2, its inner edge angled outwards below vein 5. Hind wing dark brown, the base, lower part of cell, and interspaces below and just beyond it hyaline; yellow patches on costa at base and beyond the middle.

Hab. Brazil, Rio Janeiro (*Clark*), 2 ♂, Sta. Catherina, type † ♂, ♀ in Coll. Rothschild, Petropolis (*Schaus*). *Exp.* 50 millim.

*1136 *d.* **Correbia bricenoi.** (Plate XX. fig. 24.)

Correbia bricenoi, Roths. Nov. Zool. xix. p. 181 (1912).

♀. Head and thorax black-brown; a pale orange-fulvous stripe on side of frons, back of head, tegulæ and patagia; tarsi white at base; abdomen black-brown. Fore wing pale orange-fulvous; a narrow black-brown medial band, expanding somewhat below costa and confluent with a fascia on inner margin extending from well before middle to well beyond middle; a black-brown apical patch, its inner edge incurved below costa, then excurved and narrowing to a point at vein 1. Hind wing dark brown, rather thinly scaled; some yellow on costa at base and a patch beyond middle.

Hab. Venezuela, Merida (*Briceno*), type † ♀ in Coll. Rothschild. *Exp.* 24 millim.

*1138 *a.* **Correbia semitransversa.** (Plate XX. fig. 25.)

Correbia semitransversa, Schaus, A. M. N. H. (8) vii. p. 182 (1911).

♂. Head black-brown, the palpi orange at base; frons with fulvous orange bar above, the back of head with fulvous orange stripes from behind antennæ; tegulæ and patagia fulvous orange edged with black, the dorsum of thorax black; orange stripes below shoulders and wings; coxæ orange, the fore femora with orange spot near base, the tarsi ringed with white; abdomen black-brown with lateral orange spots at base, sublateral streaks, and a broad ventral stripe on basal half. Fore wing fulvous orange; some black at base of inner margin; a medial black band from costa to vein 1, rounded below; the apical area black to vein 2, broadly at costa, narrowing below vein 5 where the orange is angled outwards. Hind wing hyaline tinged with brown; the veins black; the termen black, diffused on inner side; the underside with some orange at base, the costal area orange to near apex with black patch at middle.

Hab. Costa Rica, Juan Vinas (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 42 millim.

1139 *a*. Correbia rufescens. (Plate XX. fig. 26.)

Correbia rufescens, Roths. Nov. Zool. xix. p. 181 (1912).

♂. Head and thorax black, the upper part of frons and a broad fascia on back of head, tegulæ and patagia fulvous red; tarsi ringed with white; abdomen black-brown. Fore wing fulvous red; a black-brown streak on inner margin, expanding beyond middle; a small black spot on middle of costa conjoined to a small spot in upper part of cell; a rather large black-brown apical patch glossed with blue with a rather broad black-brown terminal band from it to tornus. Hind wing black-brown, the lower part of cell and area just below it rather thinly scaled; the basal half of costa and a spot beyond middle orange.

♀. Fore wing with the streak on inner margin narrow throughout, the cilia only brown from the apical patch to tornus.

Hab. Venezuela, 1 ♂, Caracas, type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 28, ♀ 38 millim.

*1139 *b*. Correbia meridionalis. (Plate XX. fig. 27.)

Correbia elegans, meridionalis, Roths. Nov. Zool. xix. p. 183 (1912).

♀. Head and thorax orange-scarlet; antennæ black with a small brown spot between their bases; a slight brown streak on back of head, tegulæ, and dorsum of thorax; palpi yellow, brown at tips; pectus and legs brown, the coxæ and base of femora yellow; abdomen brown, the ventral surface brownish yellow. Fore wing orange-scarlet; a minute blackish spot at middle of costa and a blackish streak on inner margin from near base to tornus; a rounded apical black-brown patch slightly tinged with bluish, the costa and veins streaked with orange, the terminal area below it with slight brown streaks in the interspaces. Hind wing brown, the lower part of cell and area just below it semihyaline; the underside with the costal area yellow towards base and beyond middle, the inner margin yellow.

Hab. Ecuador, Bulim (*Flemming*), type † ♀ in Coll. Rothschild. *Exp.* 36 millim.

*1140 *a*. Correbia flavata. (Plate XX. fig. 28.)

Correbia flavata, Druce, A. M. N. H. (8) iii. p. 458 (1909).

♂. Head and thorax scarlet; palpi, frons, antennæ, and a streak on vertex of thorax black; pectus and legs black, the tarsi ringed with white; abdomen black with a leaden gloss at extremity above. Fore wing scarlet, the costal area yellower; a small wedge-shaped black mark on extremity of vein 2 and the cilia black from below apex to that point, fuscous towards tornus. Hind wing black, somewhat semihyaline in and below lower part of cell and along vein 1. Underside of fore wing with the basal and costal areas yellow tinged with scarlet, the latter expanding into a patch in end of cell and

with its lower edge indented before apex; hind wing with the basal costal area orange, a streak on costa towards apex.

Hab. W. Colombia, San Antonio (*Palmer*), type † ♂ in Coll. Joicey. *Exp.* 42 millim.

*1140 *b*. **Correbia fulvescens.** (Plate XX. fig. 29.)

Correbia fulvescens, Dogn. Mém. Soc. Ent. Belg. xxii. p. 12 (1913).

♂. Head and thorax fulvous yellow, the antennæ black except basal joint; palpi towards tips and frons black-brown; pectus brown at sides; legs black, the coxæ fulvous, the femora yellow at base, the tarsi ringed with white; abdomen black-brown, the basal half of ventral surface fulvous. Fore wing fulvous yellow, the terminal area broadly suffused with brown, black towards apex. Hind wing hyaline, the costal area brown with a yellowish streak below costa, the veins and terminal area blackish.

Hab. Panama, Lino (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 36 millim.

*1143 *a*. **Correbidia fana.** (Plate XX. fig. 30.)

Eucereon fanum, Druce, A. M. N. H. (7) vi. p. 65 (1900).

♂. Wings broad. Black; palpi with the 1st joint and 2nd joint on inner side white; sides of frons, vertex of head, and tegulæ with white points; fore coxæ and basal half of femora orange, the tibiæ striped with white on outer side; mid and hind coxæ with white points; abdomen dorsally blue-black, a sublateral series of white spots except on terminal segment. Fore wing irrorated with bluish white in places; a subbasal double point; ill-defined subbasal antemedial and medial bands of bluish white suffusion, the last forking at middle, the outer arm ending near tornus. Hind wing with hyaline white patch in, below, and beyond lower angle of cell, the veins on it black. Underside of fore wing with short white streak below the cell and fascia on inner margin; hind wing with the inner area white; vein 8 from near angle of cell, not reaching the costa.

Hab. Venezuela, Merida (*Briceno*), type † ♂ in Coll. Joicey *Exp.* 50 millim.

1145 *a*. **Correbidia assimilis.** (Plate XX. fig. 31.)

Correbia assimilis, Roths. Nov. Zool. xix. p. 182 (1912).

Head and thorax black-brown, with a slight silvery gloss, the upper part of frons and a stripe on back of head, tegulæ, and patagia yellow; palpi yellow towards base; coxæ and base of femora yellow; abdomen brown with yellow lateral and sublateral stripes except at extremity. Fore wing yellow; a broad black-brown medial band slightly glossed with blue, its outer edge slightly incurved just below the cell, confluent with a fascia on inner

margin extending from before to beyond middle; a large apical black-brown patch glossed with blue, extending to below vein 2 and diffused to tornus. Hind wing yellow, thinly scaled, the terminal area irregularly suffused with brown.

Hab. Venezuela (*Dyson*), 1 ♀, Caura R., La Vuelta (*Klages*), type † ♂ in Coll. Rothschild, La Union; Br. Guiana; Surinam, Onor.bo (*Ellacombe*); Brazil, Amazons, San Antonio de Javary (*Klages*). *Exp.* 28 millim.

1145 *b*. **Correbidia similis.** (Plate XX. fig. 32.)

Correbia similis, Roths. Nov. Zool. xix. p. 182 (1912).

♂. Head and thorax black-brown with a slight silvery gloss; the upper part of frons yellow; a yellow stripe on back of head, tegulæ, and patagia; palpi yellow towards base; coxæ and base of femora yellow; abdomen dark brown with lateral and sublateral yellow stripes except on terminal segments. Fore wing yellow; a broad black-brown medial band slightly glossed with blue, slightly constricted just below the cell and confluent with a fascia on inner margin extending from before to beyond middle; a large apical black-brown patch glossed with blue, extending to vein 2, its inner edge indented beyond lower angle of cell. Hind wing semihyaline yellow, the terminal area irregularly suffused with brown; underside with black-brown patch glossed with blue at middle of costa.

Hab. Trinidad, Caparo (*Klages*); Venezuela, Caracas, San Estaban (*Klages*), type ♂ in Coll. Rothschild, Caura R., La Vuelta (*Klages*); Br. Guiana, Berbice, 1 ♂; Peru, Huanuco, Pozuzu (*Hoffmanns*). *Exp.* 28–30 millim.

1145 *c*. **Correbidia germana.** (Plate XXI. fig. 1.)

Pionia calopteridia, Druce, Biol. Centr.-Am., Het. i. p. 77 (nec Butl.).
Correbidia terminalis, subsp. 1, Hmpsn. Cat. Lep. Phal. B.M. i. p. 519.
Correbia germana, Roths. Nov. Zool. xix. p. 182 (1912).

♂. Head and thorax brown with a slight leaden gloss; antennæ with the basal joint ringed with yellow; a yellow stripe on back of head, tegulæ and patagia; palpi yellow except at tips; coxæ and base of femora yellow, the tarsi yellow at base; abdomen brown with yellow lateral and sublateral stripes. Fore wing yellow; a broad black-brown medial band, its outer edge incurved just below the cell, confluent with a fascia on inner margin extending from well before to well beyond middle; a large black-brown apical patch slightly glossed with blue, extending to below vein 2, its inner edge slightly indented beyond lower angle of cell. Hind wing semihyaline yellowish, the terminal area broadly and irregularly suffused with brown.

♀. Vertex of head and dorsum of thorax yellow; fore wing without brown fascia on inner margin; cilia whitish at apex; hind wing brown with the base yellow.

Hab. MEXICO, Teapa, Tabasco (*H. H. Smith*), 1 ♂, Vera Cruz, Atoyac (*H. H. Smith*), 1 ♀; GUATEMALA, Las Mercedas (*Champion*), 2 ♂, 2 ♀; COSTA RICA, Candelaria Mts. (*Underwood*), 1 ♂, 1 ♀; PANAMA, Bugaba (*Champion*), 2 ♂ Godman-Salvin Coll.; VENEZUELA, San Esteban (*Klages*), type † ♂ in Coll. Rothschild; BRAZIL, Amazons, Mapiré (*M. Stuart*); ECUADOR, Corondolet (*Flemming*); BOLIVIA, Yungas de Coroico (*Garlepp*). *Exp.* 24–30 millim.

*1145 *d.* **Correbidia simonsi.** (Plate XXI. fig. 2.)

Correbia simonsi, Roths. Nov. Zool. xix. p. 182 (1912).

Head and thorax brown, the upper part of frons yellow, yellow streaks on back of head, tegulæ and patagia; palpi yellow towards base; coxæ and base of femora yellow, the fore tibiæ at middle, the mid tibiæ except at extremities, and the hind tibiæ at base yellow; abdomen brown with yellow lateral and sublateral stripes except at extremity. Fore wing yellow; a broad medial black-brown band tinged with bluish and rather constricted below the cell, conjoined to a black-brown fascia on inner margin from near base to near tornus; a large rounded apical black-brown patch suffused with silvery blue, extending to vein 2, its inner edge indented beyond lower angle of cell. Hind wing semihyaline yellowish, the terminal area irregularly suffused with brown; the underside with black patch at middle of costa.

Hab. BRAZIL, Amazons, Fonteboa (*Klages*); PERU, Carabaya, R. Suambari, La Oroya (*Ockenden*); BOLIVIA, Salampioni (*Simons*), type † ♂ in Coll. Rothschild. *Exp* 32 millim.

*1145 *e.* **Correbidia steinbachi.** (Plate XXI. fig. 3.)

Correbia steinbachi, Roths. Nov. Zool. xix. p. 182 (1912).

♂. Head, tegulæ, and patagia fulvous yellow, the vertex of head, dorsum of tegulæ, and edges of patagia suffused with brown, the dorsum of thorax brown; antennæ black; palpi at tips and lower part of frons brown; pectus and legs yellow, the tibiæ banded with blackish, the tarsi blackish except at base; abdomen brown with lateral and sublateral yellow stripes except on terminal segments. Fore wing fulvous yellow; a rounded medial dark brown patch suffused with bluish from costa to median nervure, two obscure spots in submedian interspace, and a brown streak above inner margin from well before middle to well beyond middle; a large rounded black-brown apical patch suffused with silvery bluish, extending to below vein 3, its inner edge indented beyond lower angle of cell; a slight brown streak on terminal part of inner margin. Hind wing semihyaline whitish, the terminal area irregularly suffused with brown; the underside with black patch at middle of costal area.

Hab. BRAZIL, Amazons, Fonteboa; BOLIVIA, Buenavista (*Steinbach*), type † ♂ in Coll. Rothschild, *Exp.* 34 millim.

*1145 *f.* Correbidia apicalis. (Plate XXI. fig. 4.)

Correbidia apicalis, Schaus, Trans. Am. Ent. Soc. xxx. p. 136 (1904).

♂. Head black; palpi orange towards base; an orange bar above frons and the sides of vertex orange; thorax orange-red with black dorsal stripe; pectus and legs black, the coxæ and base of femora and tibiæ orange; abdomen black with orange lateral stripes not reaching extremity, the base of ventral surface orange. Fore wing orange-red; a black medial band from below costa to vein 1 suffused with leaden blue; an elliptical apical black patch suffused with leaden blue and extending to vein 4. Hind wing pale orange with some fuscous on terminal area at apex, in submedian fold and at tornus.

Hab. Cuba (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 28 millim.

1146 *a.* Correbidia costinotata. (Plate XXI. fig. 5.)

Correbidia costinotata, Schaus, A. M. N. H. (8) vii. p. 183 (1911).

Head and thorax orange, the vertex of head with black patch; palpi black except at base; lower part of frons and antennæ black; pectus and legs except at base black; abdomen black-brown tinged with bluish grey towards extremity, lateral orange fasciæ on basal segments and the base of ventral surface orange. Fore wing reddish orange; a small black spot at middle of costa and a slight black streak above middle of inner margin; a large apical black patch glossed with silvery blue extending to below vein 3, its inner edge bent outwards below discal fold; cilia blackish. Hind wing semihyaline brownish white, the terminal area broadly suffused with fuscous brown, some yellow on inner margin towards base. Underside of fore wing with faint brownish medial shade, the apical patch brown and not narrowing below discal fold; hind wing with the costal area orange to towards apex sometimes with a diffused dark patch below the costa at middle.

Hab. Costa Rica, Tuis (*Schaus*), 1 ♂, Juan Vinas (*Schaus*), 3 ♀, Sixola R. (*Schaus*), 1 ♀. *Exp.* 34–38 millim.

*1147 *a.* Correbidia bicolor. (Plate XXI. fig. 6.)

Charidea bicolor, Herr.-Schäff. Corresp.-blatt. Regensb. xx. p. 116 (1866).

♂. Head black, palpi towards base and sides of vertex orange; thorax orange; pectus and legs black, the coxæ and base of femora orange; abdomen black, the lateral and ventral areas orange except on terminal segment, a series of diffused ventral fuscous bands. Fore wing orange. Hind wing pale semihyaline orange, the termen fuscous emitting a streak in discoidal fold and expanding to middle of wing from vein 2 to tornus.

Hab. Cuba in U.S. Nat. Mus. *Exp.* 24 millim.

1148. **Scepsis fulvicollis**, insert :—

Scepsis packardii, var. *cocklei*, Dyar, Pr. U.S. Nat. Mus. xxvii. p. 792 (1904).

Differs from var. *paccardi* in the fore wing being blackish with the disk somewhat semihyaline.

Br. Columbia, Kaslo.

Egg. Dyar, Pr. U.S. Nat. Mus. xxiii. p. 264 (1901).

Low conoidal, more than hemispherical, base flat; shining pale yellow, finely and nearly hexagonally reticulate.

Larva. Stage I. Head rounded, slightly bilobed, whitish shading to brown with black spot on face of each lobe and smaller ones over ocelli; body whitish; cervical shield brown; tubercles and anal plate slaty black; hair long, black, spinulose.

Stage II. Head luteous with black patches on lobes; body somewhat luteous with broad dorsal brown stripe widening at incisures; a narrower irregular lateral shade forming broad rings about warts iii.; hair black and pale.

Stage III. The hair on somites 2, 3, 11, 12 long; body dull reddish with darker dorsal line, a pale subdorsal line and traces of a lateral line; warts black.

Stage IV. Warts dark grey with black hair-tubercles and black and white hair.

Stage V. Head pale brown; body black, somite 1 and ventral surface grey; warts large, black.

Stage VI. Dorsal surface grey with black-defined dorsal line; subdorsal line distinctly defined by orange, especially on posterior somites; sides black; substigmatal line pale yellow; hair on somites 2, 11, 12 long black, the rest paler; warts defined by whitish rings.

Food-plant, grasses. 9–10.

1149 *a*. **Scepsis subhyalina**. (Plate XXI. fig. 7.)

Scepsis subhyalina, Hmpsn. A. M. N. H. (7) viii. p. 175 (1901).

♂. Pale ochreous; head white; frons and vertex with black spots; palpi and antennæ ochreous and fuscous; metathorax with black spots; abdomen with lateral series of black points; wings semihyaline. Fore wing with very obscure diffused fuscous medial and subterminal lines. Hind wing nearly white.

Hab. Bolivia, Tanampaya (*Garlepp*), 1 ♂ type. *Exp*. 40 millim.

1150 *a*. **Propyria pelopia**.

Talara pelopia, Druce, Biol. Centr.-Am., Het. i. p. 125, pl. 12. f. 21 (1885); Kirby, Cat. Het. p. 291.

Fore wing with vein 6 stalked with 7, 8, 9, veins 8, 9 coincident.

♀. Head, thorax, and abdomen black; palpi at base, the sides

and upper part of frons, gulæ, and patagia orange. Fore wing orange slightly clouded with fuscous; a black streak on inner margin; the terminal area black emitting a tooth to upper angle of cell. Hind wing black with the costal half orange to beyond middle, its extremity produced to points on costa and vein 5.

Hab. PANAMA, Chiriqui (*Champion*), 1 ♀ type Godman-Salvin Coll. *Exp.* 24 millim.

*1150 *b*. Propyria atroxantha.

Propyria atroxantha, Schaus, Pr. U.S. Nat. Mus. xxix. p. 193 (1905).

♀. Head black; gulæ orange; tegulæ orange with black patches at base; thorax black with an orange dorsal streak; abdomen black with small lateral orange spots at base. Fore wing orange with the terminal area broadly black with nearly straight inner edge; a narrow black streak on inner margin except at base. Hind wing

Fig. 52.—*Propyria atroxantha*, ♀. ½.

orange with rather broad terminal black band, its inner edge sinuous and expanding below vein 2 and on inner margin to near middle.

Hab. MEXICO, Misantla, type † ♀ in U.S. Nat. Mus. *Exp.* 24 millim.

1150 *c*. Propyria criton.

Cisthene criton, Druce, Biol. Centr.-Am., Het. i. p. 124, pl. 12. f. 16 (1885); Kirby, Cat. Het. p. 291.

♂. Head and thorax black; patagia with crimson patches; abdomen black, dorsally suffused with metallic green. Fore wing black. Hind wing brilliant metallic blue, the inner and terminal areas black.

Ab. 1. Underside of fore wing with white patch at lower angle of cell.—Coatepec.

Ab. 2. Underside of hind wing white except marginal areas.—Orizaba.

Hab. MEXICO, Orizaba, Coatepec, in U.S. Nat. Mus.; GUATEMALA, Vera Paz (*Champion*), 1 ♂ type Godman-Salvin Coll. *Exp.* 22–26 millim.

1151 *a*. **Propyria normani.** (Plate XXI. fig. 8.)

Propyria normani, Schaus, A.M.N.H. (8) vii. p. 613 (1911).

♀. Head, thorax, and abdomen black-brown with a slight bronze-green tinge, the patagia crimson. Fore wing black-brown with a slight bronze-green tinge; a broad crimson fascia on costal area from base of inner margin to just before termen below apex, beyond the end of cell narrowing and leaving the costa dark. Hind wing black-brown. Underside of fore wing with the crimson extending to vein 1 on basal area; hind wing with the basal half of costa crimson.

Hab. Costa Rica, Alaguela (*Schaus*), 1 ♀ cotype. *Exp.* 24 millim.

1153 *a*. **Lycomorpha drucei.** (Plate XXI. fig. 9.)

Lycomorpha drucei, Hmpsn. A.M.N.H. (7) viii. p. 175 (1901).
Ptychoglene erythrophora, Druce, Biol. Centr.-Am., Het. i. p. 129 (part.), nec Feld.

♀. Deep black. Fore wing with crimson patch from base to well beyond middle extending from just below costa down to vein 1. Hind wing with crimson fascia on basal half of costa.

Hab. Mexico, Durango (*Becker*). 1 ♀ type. *Exp.* 28 millim.

*1154 *a*. **Lycomorpha deserta.**

Lycomorpha desertus, H. Edw. Papilio, i. p. 81 (1881); Dyar, Cat. Lep. N. Am. p. 78.

♂. Differs from *L. pholus* in the terminal black band of fore wing being narrower, broadest at apex, its inner edge oblique. Hind wing with the terminal black band narrower and not extending to base along inner margin; palpi and base of tibiæ orange.

♀. Fore wing orange with broad black subbasal band and another from costa beyond middle to tornus; thorax and abdomen orange; tibiæ and tarsi orange; antennæ blackish, paler at base.

Hab. U.S.A., Arizona, Tucson. *Exp.* ♂ 19, ♀ 32 millim. Types lost, sexes taken in copula. This species is unknown to me.

Page 523. Genus **CTENUCHA**, insert:—

	Type.
Hoplarctia, Butl. Ill. Het. B.M. i. p. 54 (1877)	*nantana*.

*1155 *a*. **Ctenucha schausi.** (Plate XXI. fig. 10.)

Ctenucha togata, schausi, Roths. Nov. Zool. xix. p. 183 (1912).

♀. Head and thorax black-brown with some metallic blue suffusion, the patagia with crimson stripes; abdomen black-brown with metallic blue segmental lines. Fore wing crimson, the costal

edge except at base, the inner margin and a terminal band black with a slight bluish gloss, the last expanding widely on apical area and moderately towards tornus; cilia white towards apex and above tornus. Hind wing black with a faint bluish gloss; cilia white at apex and below vein 2; the underside with the costal area broadly crimson from near base to well beyond middle.

Hab. Mexico, Espinal (*Schaus*), type † ♀ in Coll. Rothschild. *Exp.* 38 millim.

1155 *b*. **Ctenucha nantana.**

Ammalo nantana, Wlk. xxxi. p. 282 (1864); Butl. Ill. Het. B.M. i. p. 54, pl. 19. f. 2; Kirby, Cat. Het. p. 270.
Ctenucha rubicunda, Dogn. Le Nat. (2) xix. p. 10 (1905).

♂. Black-brown; base of palpi, frons, tegulæ, femora, and tibiæ marked with metallic blue; abdomen banded with metallic blue. Fore wing with metallic blue spot at base and short streak on inner margin; a narrow orange fascia from base through the cell to near termen; cilia orange towards tornus. Hind wing with broad medial scarlet band occupying about one-third of wing, angled outwards below vein 1 and expanding to near apex; cilia orange except towards apex.

Hab. Amazons, Nanta (*Bates*), 1 ♂ type; Peru, Huancabamba, 2 ♂. *Exp.* 42 millim.

1156. **Ctenucha cyaniris**, insert (syn.) :—

Ctenucha annulata, Schaus, Trans. Am. Ent. Soc. xxx. p. 137 (1904).

♀. Abdomen with more or less prominent yellow segmental lines except on last two segments; hind wing with the orange patch on costal area more or less reduced; underside of fore wing with some metallic blue but no white suffusion, of hind wing with much less white suffusion on basal area.

Panama; Bolivia, Yungas la Paz. Type † ♀ in U.S. Nat. Mus.

*1156 *a*. **Ctenucha refulgens.** (Plate XXI. fig. 11.)

Ctenucha refulgens, Dogn. Ann. Soc. Ent. Belg. xliii. p. 327 (1899).

♂. Head, thorax, and abdomen black, the vertex of head and dorsal surface of thorax and abdomen shot with brilliant blue; the frons, base of palpi, pectus, ventral surface of abdomen, and greater part of legs white. Fore wing black suffused with brilliant blue, in cell to middle and on inner area to beyond middle; an oblique orange medial band from below costa to above inner margin. Hind wing black suffused with brilliant blue to two-thirds of wing. Underside bluish white, on fore wing to middle, on hind wing all except an apical black patch.

Hab. Ecuador, type † ♂ in Coll. Dognin. *Exp.* 28 millim.

*1156 *b*. **Ctenucha biformis.** (Plate XXI. fig. 12.)

Ctenucha biformis, Dogn. Ann. Soc. Ent. Belg. li. p. 224 (1907).

♂. Head and thorax black with brilliant metallic blue patches on frons, vertex of head, tegulæ, patagia, and metathorax; palpi blue in front and with white points at base; basal joint of antennæ with white points; legs streaked with blue, the coxæ with white patches, the extremities of tibiæ and the tarsi mostly white; abdomen black almost entirely suffused with brilliant metallic blue, a white ventral fascia. Fore wing black with metallic blue stripes below basal half of costa and above vein 1 to beyond middle and some blue irroration above and below median nervure to beyond middle; a deep crimson patch in end of cell and broad oblique band from below end of cell to above tornus; diffused blue streaks above and below base of vein 4. Hind wing black with diffused metallic blue streaks above and below median nervure to just beyond angle of cell and on vein 4; the underside metallic blue, the terminal area very irregularly black, on costa extending to before middle, a white spot in end of cell and patch below end of cell.

♀. Fore wing with the patch and band orange; hind wing without the white spot in cell on underside.

Hab. Peru, Cagon, type † ♂, ♀ in Coll. Dognin. *Exp.* 32 millim.

*1157 *a*. **Ctenucha garleppi.** (Plate XXI. fig. 13.)

Ctenucha garleppi, Roths. Nov. Zool. xix. p. 184 (1912).

♂. Head and thorax black-brown with some metallic blue suffusion; palpi at base, frons and gulæ white; coxæ white; femora and tibiæ streaked with white; abdomen black-brown suffused with metallic blue, the ventral surface white except at extremity. Fore wing black-brown, the basal area suffused with metallic blue, its outer edge oblique; a broad oblique orange band from just below middle of costa to just above inner margin towards tornus. Hind wing black-brown suffused with metallic blue except on apical area; a large conical orange patch from subterminal part of costa to vein 2. Underside of fore wing with some white on base of costa and on basal half of inner area; hind wing with the basal area suffused with white running obliquely to tornus.

♀. Abdomen with diffused orange dorsal streak except on basal and anal segments; fore wing with the orange band ending at vein 1 and the blue extending to near tornus; hind wing with the orange patch irrorated with brown.

Hab. Peru, Cuzco (*Garlepp*), type † ♂ in Coll. Rothschild, Chulumanito (*Simons*). *Exp.* ♂ 36, ♀ 30 millim.

*1157 *b*. Ctenucha popayana. (Plate XXI. fig. 14.)

Ctenucha popayana, Dogn. Hét. Nouv. Am. Sud, ii. p. 12 (1911).

♂. Head, thorax, and abdomen black-brown suffused with brilliant metallic blue; frons and basal joint of antennæ in front white; pectus in front, coxæ and femora and tibiæ below white; abdomen with the ventral surface white except towards extremity. Fore wing black-brown, the basal area suffused with brilliant metallic blue; a broad oblique yellow band from just below middle of costa to inner margin towards tornus, its edges slightly sinuous. Hind wing black-brown, the basal half and inner area suffused with brilliant metallic blue; a large oblique conical yellow patch from costa beyond middle to below vein 3. Underside of fore wing with the basal area suffused with white and tinged with metallic blue, some metallic blue beyond the postmedial yellow band; hind wing with the basal half and inner area suffused with white tinged with metallic blue.

♀. Underside of wings without the white and blue suffusion.

Hab. Colombia, Popayan, type † ♂, ♀ in Coll. Dognin. *Exp.* ♂ 34, ♀ 38 millim.

*1157 *c*. Ctenucha mennisata. (Plate XXI. fig. 15.)

Ctenucha mennisata, Dogn. Ann. Soc. Ent. Belg. xliv. p. 213 (1900).

♂. Head, thorax, and abdomen black shot with blue; some white hair at back of head and base of abdomen, the rest of abdomen with some yellow hair; palpi, frons, pectus, legs, and ventral surface of abdomen white. Fore wing black-brown, the inner area shot with blue; an orange patch from close to base to beyond middle and from just below costa to vein 1, the subcostal and median nervures streaked with black. Hind wing black-brown shot with blue; the costal area white to beyond middle, tinged with yellow at extremity. Underside of fore wing with some white below basal part of costa, on inner area and on veins 3, 4, 5; hind wing white with apical black patch with some yellow before it below costa.

Hab. Bolivia, Yungas, type † ♂ in Coll. Dognin. *Exp.* 30 millim.

1157 *d*. Ctenucha albipars. (Plate XXI. fig. 16.)

Ctenucha albipars, Hmpsn, A. M. N. H. (7) viii. p. 175 (1901).

♂. Dull black; frons, vertex of head, and metathorax with patches of brilliant blue; abdomen dorsally shot with blue, a white patch at base of ventral surface. Fore wing with medial orange-yellow band sometimes not quite reaching costa or inner margin. Hind wing white, the terminal third black, expanding somewhat towards costa. Underside of hind wing with bluish fuscous patch on costa near base followed by a yellow patch.

The two specimens examined have some grey on terminal band of hind wing expanding into a large patch before tornus on upperside, at tornus on underside and narrowing to a point at vein 4; this, however, does not absolutely agree in the two specimens or on both sides of the same specimen and may be a stain.

Hab. Bolivia, San Jacinto, Locotal (*Garlepp*), 1 ♂ type. *Exp.* 32 millim.

1158 *a*. **Ctenucha mortia.** (Plate XXI. fig. 17.)

Ctenucha braganza, Hmpsn. Cat. Lep. Phal. B.M. i. p. 526 (part.).
Ctenucha mortia, Schaus, J. N.Y. Ent. Soc. ix. p. 44 (1901).

The form with the white band of fore wing not extending below vein 4.

Hab. Brazil, Rio de Janeiro, 1 ♂, Tijuca (*Wagner*), 1 ♂. *Exp.* 50 millim. Type † in U.S. Nat. Mus.

*1159 *a*. **Ctenucha manuela.**

Ctenucha manuela, D. Jones, Trans. Ent. Soc. 1914, p. 7, pl. i. f. 13.

♂. Head and thorax black-brown, the palpi except 3rd joint, gulæ, back of head and neck orange; the dorsum of thorax with fine white streak; legs streaked with white; abdomen black-brown shot with blue, the ventral surface with diffused white bands, narrow on terminal segments and the anal tuft orange. Fore wing black-brown with fine grey streaks on the veins and in submedian fold; an oblique wedge-shaped white postmedial patch from below costa to vein 3. Hind wing black-brown shot with blue, the cilia white at tips towards apex. Underside of fore wing with white streak below the cell to origin of vein 2.

Hab. Brazil, Santos, Guarujá (*D. Jones*), type † ♂ in Coll. D. Jones. *Exp.* 38 millim.

*1159 *b*. **Ctenucha nana.**

Ctenucha nana, D. Jones, Trans. Ent. Soc. 1914, p. 6, pl. i. f. 12.

♂. Head and thorax olive-brown; palpi except at tips, gulæ, back of head and neck orange; patagia and dorsum of thorax with fine whitish streaks; legs streaked with white; abdomen olive-brown tinged with blue, the anal tuft orange at tips, the ventral surface with white bands. Fore wing olive-brown, the veins and submedian fold with grey streaks; an oblique postmedial white wedge-shaped patch from below costa to above vein 3. Hind wing olive-brown tinged with blue, the cilia white at tips towards apex. Underside of fore wing with white fascia below the cell to beyond origin of vein 2; hind wing with white fascia in and just beyond the cell and the cilia wholly white.

Hab. S. Brazil, Santos, Guarujá (*D. Jones*), type † ♂ in Coll. D. Jones. *Exp.* 32–36 millim.

1159 *c*. **Ctenucha andrei.** (Plate XXI. fig. 18.)

Ctenucha andrei, Roths. Nov. Zool. xix. p. 184 (1912).

Head and thorax dark brown with fine white streaks on patagia and dorsum of thorax; eyes with slight white ring; basal half of palpi and throat orange; coxæ and femora with slight white streaks; abdomen dark brown tinged with blue, the ventral surface with slight white segmental rings; the anal tuft orange. Fore wing black-brown with fine grey streaks on the veins, in the cell and in submedian fold; an oblique white band from below costa beyond middle to below vein 3 towards termen, narrowing below. Hind wing black-brown suffused with blue; cilia white with some fuscous towards tornus.

Hab. Trinidad, Ariapite Valley, type † ♀ in Coll. Rothschild; Br. Guiana, Demerara (*Rodway*), 1 ♂. *Exp.* 46 millim.

1160 *a*. **Ctenucha jonesi.** (Plate XXI. fig. 19.)

Ctenucha jonesi, Roths. Nov. Zool. xix. p. 184 (1912).

♀. Head and thorax black-brown, the latter with fine whitish streak on dorsum and the patagia with slight greyish streaks at middle and upper edge; the eyes with white ring in front and above; basal half of palpi and throat orange; abdomen uniform black-brown tinged with blue. Fore wing black-brown with fine bluish grey streaks on the veins and in the cell and submedian fold; an oblique white band from below costa beyond middle to below vein 3 towards tornus, expanding and rounded above and interrupted by a streak on vein 3. Hind wing black-brown tinged with blue; cilia white mixed with some fuscous from apex to vein 2.

Hab. Brazil, Castro Paraña (*D. Jones*), 2 ♀. *Exp.* 44 millim. Type † ♀ in Coll. Rothschild.

*1161 *a*. **Ctenucha reimoseri.** (Plate XXI. fig. 20.)

Ctenucha reimoseri, Zerny, Iris, 1912, p. 124.

♀. Head, thorax, and abdomen black-brown; 1st joint of palpi, gulæ, shoulders, and anal tuft orange. Fore wing black-brown with a large rather quadrate white spot in end of cell. Hind wing black-brown, the cilia white at apex.

Hab. Paraguay, San Luis (*Reimoser*), type † ♀ in Mus. Vienna. *Exp.* 36 millim.

*1164 *a*. **Ctenucha fosteri.** (Plate XXI. fig. 21.)

Ctenucha fosteri, Roths. Nov. Zool. xix. p. 184 (1912).

♂. Head orange-yellow, the palpi, except behind, brown; antennæ blackish; thorax dark brown, the tegulæ in front and at

sides and the upper edge of patagia yellow; mid and hind femora and tibiæ at extremities white; abdomen dark brown. Fore wing dull brown with traces of whitish streaks below costa and on vein 1; cilia with some white at tips. Hind wing darker brown; cilia white, brown at base between veins 5 and 2.

Hab. Paraguay, Sapucay (*Foster*), type † ♂ in Coll. Rothschild. *Exp.* 42 millim. This is probably an aberration of *C. divisa*, which occurs in the same locality.

*1164 *b*. **Ctenucha tucumana.** (Plate XXI. fig. 22.)

Ctenucha rubrovenata, tucumana, Roths. Nov. Zool. xix. p. 184 (1912).

♂. Head orange-red; palpi at tips and antennæ black; thorax dark brown, the edges of tegulæ except behind and the edges of patagia orange-red; legs streaked with yellowish white; abdomen dark brown tinged with bluish, the ventral surface with yellowish white lines on two medial segments. Fore wing dark brown with orange-red streaks on costa and the veins; cilia white, brown at base. Hind wing black-brown, the cilia white. Underside of fore wing with white streak below base of cell, some diffused white in and below end of cell, and postmedial streaks on veins 6, 4, 3, 2, 1; hind wing with slight yellowish white streaks on subcostal and median nervures and veins 7, 6, 4, 3, 2.

Ab. 1. Black-brown, the markings of head and thorax yellower; fore wing with the streaks fewer and yellow, absent on subcostal nervure and veins 8 and 7.

Hab. Argentina, Salta (*Steinbach*), type † ♂ in Coll. Rothschild, Tucuman. *Exp.* 38–40 millim.

*1165 *a*. **Ctenucha rubrovenata.** (Plate XXI. fig 23.)

Ctenucha rubrovenata, Roths. Nov. Zool. xix. p. 184 (1912).

♂. Head and thorax black-brown with some silvery blue mixed, the back of head and streaks on upper edge of patagia orange-scarlet; palpi at base and throat at sides orange-scarlet; mid and hind femora and tibiæ at extremities white; abdomen black-brown with some silvery blue suffusion except on ventral surface. Fore wing black-brown, the basal half of costal edge, streaks on extremity of subcostal nervure and veins 7, 6, streaks on median nervure and veins 4 to 2 and vein 1 orange-scarlet to towards termen; cilia white, yellow at base. Hind wing black-brown faintly tinged with blue; cilia white with some brown at base between veins 4 and 3. Underside of both wings tinged with blue; fore wing with slight oblique white streak below base of cell.

♀. Back of head, upper edge of patagia, palpi at base and throat yellower; fore wing with the streaks yellow.

Hab. Bolivia, Yurgas de Coroica (*Garlepp*), type † ♂, ♀ in Coll. Rothschild, R. Songo. *Exp.* ♂ 30, ♀ 26 millim.

*1165 *b*. **Ctenucha reducta.** (Plate XXI. fig. 24.)

Ctenucha reducta, Roths. Nov. Zool. xix. p. 184 (1912).

Head and thorax black tinged with silvery bluish; the upper edge of patagia with deep scarlet streak; eyes with fine white ring; palpi at base and pectus at sides in front deep scarlet; hind tibiæ at extremities white; abdomen black-brown suffused with metallic blue. Fore wing black-brown tinged with blue; the basal half of costal edge deep scarlet; the median nervure and veins 6, 4, 3 and 1 to towards termen and base of vein 2 with deep scarlet streaks; cilia white with some brown at base. Hind wing black-brown suffused with blue; cilia white. Underside of both wings suffused with blue; retinaculum white.

Ab. 1. Markings of head, thorax, and fore wing yellow.

Ab. 2. Base of palpi and streaks on patagia white, pectus in front at sides orange-scarlet, legs striped with white; fore wing with the streaks fine and white.

Hab. PERU, Carabaya, Oconeque (*Ockenden*), type † ♂ in Coll. Rothschild, Limbani (*Ockenden*), Agualani (*Ockenden*), Carobas (*Simons*). *Exp.* 40 millim.

1165. **Ctenucha venosa**, insert (syn.) :—

Ctenucha tigrina, Streck. Lep. Rhop. & Het., Suppl, ii. p. 4 (1899).

1166. **Ctenucha sanguinaria**, insert :—

Ctenucha cressonana, Grote, Proc. Ent. Soc. Phil. ii. p. 64, pl. 8. fig (1863)

which has precedence.

Ab. 1. *lutea*, Grote, Can. Ent. xxxiv. p. 104 (1902).

Fore wing with the costa scarlet, the streaks on the veins orange, the streak on vein 6 absent.

Hab. U.S.A., Colorado, New Mexico. *Exp.* 46 millim.

1173 *a*. **Ctenucha projecta.** (Plate XXI. fig. 25.)

Ctenucha projecta, Dogn. Le Nat. (2) xviii. p. 67 (1904). March.
Ctenucha albolineata, Druce, A. M. N. H. (7) xiii. p. 241 (1904). Apr.

♂. Head, thorax, and abdomen black-brown mixed with metallic blue. Fore wing black-brown, the veins darker; a small metallic blue spot at base; a narrow white fascia from base through the cell to near termen above vein 5, slightly expanding at extremity where there is a white spot above it above vein 6. Hind wing black-brown; a broad white fascia beyond the cell above vein 5, ending well before termen and at its extremity expanding to above vein 7.

Hab. N. PERU, Huancabamba, 10,000′, 1 ♂. *Exp.* 46 millim.

*1174 *a*. **Dahana cubana.** (Plate XXI. fig. 26.)

Dahana cubana, Schaus, Trans. Am. Ent. Soc. xxx. p. 136 (1904).

♂. Head and thorax greyish black; base of palpi, gulæ, and front of pectus scarlet; some blue on head, tegulæ, and prothorax and stripes on upper edge of patagia; abdomen metallic blue with the last three segments scarlet and dorsal triangular patch on three segments before them, the ventral surface brown. Fore wing greenish black with some blue at base. Hind wing brilliant blue, the terminal area irregularly black shot with blue. Underside of fore wing brilliant blue to beyond middle.

Hab. Cuba, Tanamo, type † in U.S. Nat. Mus. *Exp.* 30 millim.

*1176 *a*. **Epectaptera miniata.** (Plate XXI. fig. 27.)

Ectaptera miniata, Roths. Nov. Zool. xxx. p. 185 (1912).

♂. Head, thorax, and abdomen red-brown; antennæ blackish; palpi and legs with some brownish white hair; ventral surface of abdomen brownish white. Fore wing red-brown, the costal area tinged with whitish to beyond middle with a crimson streak on costa to middle, then below costa to the end of the pale area; minute hyaline subterminal spots above and below vein 4. Hind wing scarlet, the base dark brown with irregular outer edge; blackish streaks on the veins and in cell and a narrow discoidal lunule; the inner margin dark brown; the terminal area dark brown, its inner edge excurved between veins 5 and 3, then incurved. Underside of fore wing orange-scarlet, the veins and cell with dark streaks, dark fasciæ in base of cell and on inner margin and a darker band beyond the cell from vein 6 to 1; hind wing with the terminal band almost obsolete from apex to vein 3.

Hab. Peru, Huancabamba, Cerro de Pasco (*Böttger*), type † ♂ in Coll. Rothschild. *Exp.* 38 millim.

1176 *b*. **Epectaptera discalis.** (Plate XXI. fig. 28.)

Epectaptera discalis, Schaus, Pr. U.S. Nat. Mus. xxix. p. 194 (1905).

♂. Head and thorax fuscous brown; fore coxæ with metallic blue patches; abdomen metallic blue with some fuscous hair at base and the ventral surface fuscous. Fore wing fuscous brown with slight pale irroration; a quadrate yellowish white spot in middle of cell, irrorated with fuscous hair and bisected by a dark streak in discal fold; an ill-defined dark postmedial line oblique from costa to vein 5, then angled inwards and ending at vein 3. Hind wing yellow tinged with scarlet, the marginal areas broadly fuscous.

Ab. 1. Hind wing yellow without scarlet tinge.

Hab. Peru, Carabaya, 1 ♂, Agualani (*Ockenden*), 2 ♂. *Exp.* 36 millim. Type † ♂ in U.S. Nat. Mus.

*1176 *c*. **Epectaptera metochria.** (Plate XXI. fig. 29.)

Epectaptera metochria, Dogn. Hét. Nouv. Am. Sud, vi. p. 3 (1912). Nov.
Ectaptera drucei, Roths. Nov. Zool. xix. p. 185 (1912). Dec.
Ectaptera roseipennis, Roths. Nov. Zool. xix. p. 185 (1912).

♂. Head and thorax fuscous brown; antennæ black, whitish at tips; the back of head with some crimson at sides; abdomen fuscous brown, dorsally suffused with brilliant metallic blue except at base. Fore wing uniform fuscous brown. Hind wing ochreous yellow, the marginal areas broadly fuscous brown except the inner area towards base; the veins fuscous brown.

Ab. 1. *roseipennis*. Hind wing with the yellow replaced by pink.

Hab. Colombia, Bogotá, types † ♂ *drucei* and *roseipennis* in Coll. Rothschild, Monte Tolima, type † ♂ in Coll. Dognin. *Exp.* 40 millim.

*1176 *d*. **Epectaptera umbrescens.** (Plate XXI. fig. 30.)

Epectaptera umbrescens, Schaus, Pr. U.S. Nat. Mus. xxix. p. 194 (1905).

♂. Head, thorax, and abdomen dull brown with a few orange hairs; head with some grey hairs, the frons and vertex with slight blue patches; fore coxæ white in front and bluish at sides, the mid and hind coxæ and ventral surface of abdomen with some whitish. Fore wing dull red-brown irrorated with a few pale scales; traces of a rounded darker discoidal spot. Hind wing dark brown slightly irrorated with pale scales; a diffused dull orange patch in and beyond end of cell; the underside dull orange irrorated with brown, the costa narrowly brown, a terminal brown band expanding widely at apex, below vein 2, and at tornus.

Hab. Peru, Carabaya, type † ♂ in U.S. Nat. Mus. *Exp.* 32 millim.

*1176 *e*. **Epectaptera innotata.** (Plate XXI. fig. 31.)

Epectaptera innotata, Dogn. Ann. Soc. Ent. Belg. xliii. p. 327 (1899).

♀. Head, thorax, and abdomen black-brown. Fore wing dark brown rather thinly scaled; the veins darker. Hind wing semi-hyaline brownish; the veins dark; some brownish suffusion on terminal area towards apex and tornus.

Hab. Ecuador, Loja, type † ♀ in Coll. Dognin. *Exp.* 28 millim.

1177 *a*. **Philoros nora.** (Plate XXII. fig. 1.)

Philoros nora, Druce, A.M.N.H. (7) xviii. p. 81 (1906).

Head and thorax fuscous brown; palpi crimson at base, white in front; frons and basal joint of antennæ in front white; neck with crimson ring; dorsum of thorax and patagia with fine yellowish

white streaks; coxæ with white patches; legs streaked with white; abdomen fuscous brown with slight white segmental line on 1st segment and blue lines on terminal segments, the anal tuft crimson, a diffused ventral white fascia. Fore wing black-brown, the costal edge white to beyond middle and towards apex; a narrow pink fascia on inner margin. Hind wing black-brown shot with blue; a bright pink apical patch and patch on terminal area from vein 3 to tornus with irregular inner edge, extending on inner margin to before middle.

Hab. Peru, La Merced (*Watkins*), type † in Coll. Joicey, Chanchamayo, 1 ♀. *Exp.* 40 millim.

1178. **Philoros rubriceps**, insert (syn.):—

Philoros rubriceps, griseatus, Roths. Nov. Zool. xix. p. 186 (1912).

Venezuela, Merida (*Briceno*), type † ♂, ♀ in Coll. Rothschild.

1178*a*. **Philoros affinis**. (Plate XXII. fig. 2.)

Philoros rubriceps, affinis, Roths. Nov. Zool. xix. p. 185 (1912).

Head yellow; antennæ, frons, and palpi at tips brown; thorax dark red-brown; fore coxæ whitish on inner side; abdomen dark brown suffused with bluish except on ventral surface. Fore wing dull red-brown, the cilia white at tips. Hind wing dark brown with a slight bluish gloss; cilia white, brown at base from apex to vein 2 and brown at tornus.

Hab. Brazil, Rio Janeiro (*Wilson*), 3 ♂, 1 ♀, Tijuca (*Wagner*), 1 ♂, São Paulo (*D. Jones*), 2 ♂, Castro Paraña (*D. Jones*), 1 ♂; Uruguay, Banda Oriental (*Berg*), 1 ♂, Monte Video (*O. Thomas*), 1 ♂; Paraguay, Sapucay (*Foster*), 3 ♂, 2 ♀; Peru, Cuzco (*Garlepp*), type † ♂ in Coll. Rothschild; Argentina (*O. Thomas*), 1 ♂, Resistencia (*Tarn*), 2 ♂. *Exp.* 26–32 millim.

1180. **Hyaleucerea vulnerata**, insert (syn.):—

Glaucopis myrrhine, Burm. Descr. Rep. Arg. v. p. 375, Atlas, pl. xvii. f. 6 (1880).

1180*a*. **Hyaleucerea phæosoma**. (Plate XXII. fig. 3.)

Hyaleucerea phæosoma, Hmpsn. A. M. N. H. (7) xv. p. 431 (1905).
Hyaleucera minuta, Roths. Nov. Zool. xix. p. 186 (1912).

♂. Head and thorax olive-brown tinged with fuscous; neck with crimson ring; palpi yellowish white at base; coxæ whitish, femora with whitish stripes, tarsi with pale rings; abdomen fuscous with a bluish tinge, the ventral surface white. Fore wing black-brown, the veins streaked with olive; ill-defined olive streaks from base below costa and cell and a spot on costa before middle; a hyaline patch towards end of cell divided by a dark streak in discal fold; hyaline patches below the cell before vein 2 and above

its base; hyaline spots beyond the cell above and below vein 6 and further from base above and below vein 4; a waved olive subterminal line bent outwards to near tornus between veins 6 and 5; a slight apical spot. Hind wing hyaline; the veins black; the terminal area broadly blue-black, the hyaline extending to near termen between veins 5 and 2; cilia whitish at tips.

Hab. Paraguay, Sapucay (*Foster*), 2 ♂ type; Bolivia, Yungas de Coroico (*Garlepp*), type † ♂ *minuta* in Coll. Rothschild. *Exp.* 30 millim.

1182 *a*. **Hyaleucerea leucosticta.**

Hyaleucerea leucosticta, Druce, A. M. N. H. (7) xv. p. 466 (1905).

Hind wing with vein 3 from well before angle of cell.

♂. Head, thorax, and abdomen black; base of palpi, sides of frons, vertex, back of head, tegulæ and shoulders with white points; pro- and metathorax, pectus at sides, coxæ and femora at extremity with white spots; abdomen with dorsal white point on 1st two segments, an ochreous spot on anal segment and lateral ochreous

Fig. 53.—*Hyaleucerea leucosticta*, ♂. ½.

streaks. Fore wing black-brown with white point at base and slight streak below base of costa; an oblique ill-defined pale fascia from inner margin before middle to lower angle of cell where it is connected with a broad very ill-defined band from below costa to termen above tornus, the veins crossing it dark. Hind wing black with hyaline fascia below the cell, extending at base to below vein 1.

Hab. Venezuela, Caura Valley (*Klages*), 9 ♂. *Exp.* 44 millim.

*1183 *a*. **Hyaleucerea costinotata.** (Plate XXII. fig. 4.)

Eucereon costinotatum, Dogn. Ann. Soc. Ent. Belg. xliv. p. 436 (1900).

♀. Head, thorax, and abdomen black; palpi with the 1st joint white; sides of frons white; antennæ with white points on shaft; back of head with two white spots; tegulæ and thorax with white spots; patagia edged with white; pectus whitish; legs striped with white; abdomen black-brown slightly tinged with blue, a small whitish spot at base, the extremity orange, the ventral surface white except at extremity. Fore wing black, the interspaces streaked with yellowish white, interrupted at end of cell; a postmedial white patch between veins 7 and 5 with yellowish white

above it on costa and slight yellowish white subterminal spots beyond it. Hind wing black, the interspaces rather paler except on terminal area.

Hab. Brazil, São Paulo, Paranapanema, type † ♀ in Coll. Dognin. *Exp.* 32 millim.

1183 *b*. **Hyaleucerea sororia.** (Plate XXII. fig. 5.)

Hyaleucerea sororia, Schaus, A. M. N. H. (8) vi. p. 196 (1910).

♂. Head, thorax, and abdomen black-brown; frons with slight pale lines at sides and bar above, the back of head with pair of orange spots, the patagia with orange streaks; femora slightly streaked with whitish; abdomen with the extremity orange, the ventral surface whitish towards base. Fore wing black-brown; a dark patch on subcostal area at end of cell with oblique band from it to inner margin; yellow streaks on and below basal half of costa, in basal half of upper part of cell, in lower part of cell, two in submedian interspace and one above inner margin except at base; the interspaces between veins 5 and 2 with yellow streaks; an oblique postmedial white patch between veins 8 and 5 with a yellow mark above it on costa; a white mark on termen above vein 5; cilia white between vein 5 and submedian fold. Hind wing semihyaline tinged with fuscous, the veins and terminal area black.

Hab. Costa Rica, Juan Vinas (*Schaus*), 1 ♂. *Exp.* 28 millim.

*1183 *c*. **Hyaleucerea uniformis.** (Plate XXII. fig. 6.)

Hyaleucera uniformis, Roths. Nov. Zool. xix. p. 186 (1912).

♀. Head, thorax, and abdomen dull reddish brown. Fore wing dull reddish brown, the base of inner margin, veins and cilia darker. Hind wing dark brown, the cell and interspaces just below and beyond it semihyaline; the underside brownish white with the veins dark.

Hab. S. Brazil, Sta. Catherina, type † ♂ in Coll. Rothschild. *Exp.* 44 millim.

*1183 *d*. **Hyaleucerea lugubris.** (Plate XXII. fig. 7.)

Hyaleucereon lugubris, Schaus, J. N.Y. Ent. Soc. ix. p. 44 (1901).

♂. Head, thorax, and abdomen dull grey-brown. Fore wing dull reddish brown, the veins slightly suffused with bluish. Hind wing dull grey-brown.

Hab. Colombia (*W. E. Pratt*), type † ♂ in U.S. Nat. Mus. *Exp.* 44 millim.

1183 *e*. **Hyaleucerea mundula.** (Plate XXII. fig. 8.)

Halysidota mundula, Berg, Ann. Soc. Arg. xiii. p. 216 (1882); Kirby, Cat. Het. p. 211.

White with a slight ochreous tinge, especially on head; antennæ with the branches blackish below. Fore wing with the veins yellowish.

Hab. Brazil, Rio Grande do Sul (*Hawkshaw*), 2 ♀; Paraguay, Sapucay (*Foster*), 1 ♂; Argentina, Corrientes. *Exp.* 28–36 millim.

*1184 *a*. **Hyaleucerea leucoprocta.** (Plate XXII. fig. 27.)

Hyaleucerea leucoprocta, Dogn. Ann. Soc. Ent. Belg. liii. p. 217 (1909).

♂. Head and thorax grey, the tegulæ and patagia slightly edged with black; palpi and antennæ black; pectus and legs black, the former with whitish lateral patches, the fore and mid femora and tibiæ and the 1st two joints of fore tarsi with whitish streaks, the hind femora at extremity and base of tibiæ whitish; abdomen black with large whitish dorsal patch on four terminal segments and lateral white stripes. Fore wing grey, the veins, margins, discal and submedian folds black; the basal area black below the cell, with oblique outer edge; a blackish shade from middle of costa to discal fold and a postmedial shade from costa to median fold. Hind wing black with a hyaline streak in lower extremity of cell.

Hab. Fr. Guiana, St. Laurent Maroni, type † ♂ in Coll. Dognin. *Exp.* 46 millim.

1184 *b*. **Hyaleucerea morosa.** (Plate XXII. fig. 28.)

Hyaleucerea morosa, Schaus, A. M. N. H. (8) vi. p. 195 (1910).

♂. Head and thorax dark bluish grey, the palpi and antennæ blackish, the back of head with deep fulvous red patch, the patagia slightly streaked with black; shoulders with deep fulvous red patches; abdomen black tinged with blue. Fore wing blue-grey, the veins, discal and submedial folds streaked with black; a medial black patch from cell to inner margin; a diffused black subterminal band, curved inwards to costa and expanding somewhat at discal fold and below vein 3; cilia black. Hind wing fuscous black with a bluish tinge, the lower part of cell and area just below and beyond it semihyaline.

Hab. Costa Rica, Juan Vinas (*Schaus*), 1 ♂. *Exp.* 46 millim.

1184 *c*. **Hyaleucerea lemoulti.** (Plate XXII. fig. 29.)

Eucereon lemoulti, Schaus, Pr. U.S. Nat. Mus. xxix. p. 192 (1905).

♂. Head and thorax dark brown mixed with grey; neck with fulvous orange ring; abdomen black slightly tinged with blue. Fore wing grey, the veins, margins and diffused patches on inner basal area, discocellulars and middle of vein 2 black. Hind wing grey with hyaline fascia in and below lower part of cell; the veins, margins and diffused streaks on terminal area below apex and vein 2 black.

Hab. Dutch Guiana, Surinam, R. Gildersland, 1 ♂; Fr. Guiana. *Exp.* 34 millim.

ADDENDA.

74. **Amata pectoralis**, insert (syn.) :—

Eressa rubribasis, de Joan. Bull. Soc. Ent. Fr. 1912, p. 287.

Cochin China, Thudaumot, type † ♀ in Coll. de Joannis.

*74 *c*. **Amata fouqueti.** (Plate XXII. fig. 35.)

Ceryx fouqueti, de Joan. Bull. Soc. Ent. Fr. 1912, p. 286.

♂. Head and thorax black; frons white; shoulders and coxæ with white patches; pectus with crimson lateral patches behind; abdomen crimson, the three terminal segments black with a bluish gloss, the 2nd and 3rd segments with narrow black segmental bands. Fore wing black with a slight cupreous gloss; wedge-shaped hyaline patches in and below the cell and elongate spots above veins 6, 4, 3. Hind wing hyaline, the veins and margins black, the terminal black band expanding towards apex.

Hab. Cochin China, Cap St. Jacques (*Fouquet*), type † ♂ in Coll. de Joannis. *Exp.* 22 millim. This is possibly the male of *A. pectoralis*.

250. **Dysauxes punctata**, insert :—

punctilla, hybr. *punctata* × *ancilla*, Denso, Iris, xxvi. p. 135 (1912).

Larva. Kirby, Butt. Moths Eur. p. 97; Hffm. Raup. p. 38, pl. 10. f. 12; Mill. Icones, i. p. 250, pl. 4. ff. 10, 11.

Brown, very hairy and with tufts of black hair; head black. Food-plants, Lichens. 5.

251. **Dysauxes ancilla.**

Larva. Kirby, Butt. Moths Eur. p. 96; Hffm. Raup. p. 38, pl. 10. f 11.

Black with yellow dorsal and lateral lines. Food-plants, Lichens. 7–8.

266 *a*. **Apisa sjostedti**, insert :—

Var. *homopunctata*, Strand, Arch. Naturg. lxxviii. Abt. A. 6, p. 185 (1912). Cameroons.

268. **Apisa chrysopyga**, insert :—

Var. *ruficilla*, Strand, Arch. Naturg. lxxviii. Abt. A. 6, p. 184 (1912).

Cameroons.

272. **Apisa monotica**, insert:—

Ab. *deannulata*, Strand, Arch. Naturg. lxxviii. Abt. A. 6, p. 184 (1912).

Cameroons.

Page 143. Genus **METARCTIA**, insert (syn.):— Type,

Thyretarctia, Strand, Arch. Naturg. lxxviii. Abt. A. 6, p. 189 (1912). *hæmatica*.

279. **Metarctia invaria**, insert:—

Ab. *pusillima*, Strand, Arch. Naturg. lxxviii. Abt. A. 6, p. 187 (1912).

294 *e*. **Balacra preussi**, insert:—

Ab. *longimaculata*, Strand, Arch. Naturg. lxxviii. Abt. A. 6, p. 189 (1912).

295. **Balacra flavimacula**, insert:—

Abs. *elegantissima* and *monotonia*, Strand, Arch. Naturg. lxxviii. Abt. A. 6, p. 191 (1912).

Page 164. Genus **PARAMYA**, insert:—

Methysia, Butl. from p. 401 for Sect. 1, which has precedence; the neuration of the hind wing is incorrectly figured, it is similar to that of *P. intersecta*.

325 *a*. **Methysia notabilis**, trans. from p. 401.

325 *b*. **Methysia melanota**, trans. from Suppl. I, p. 256.

378 *h*. **Sarosa ignicornis**, n. sp. (Plate XXII. fig. 31.)

♂. Head and thorax black-brown; some metallic blue on vertex of head, the tegulæ, shoulders, patagia, and dorsum with slight yellow marks; antennæ fiery red with some black on inner side of shaft and yellow spots on basal joint behind; palpi with the 3rd joint yellow in front; tarsi orange with slight dark streaks on outer side of 1st joint; abdomen black-brown with yellow dorsal patch on basal segment and narrow band at base of 2nd segment which has subdorsal metallic blue spots, the terminal segments suffused with metallic blue, the 3rd segment with lateral and ventral yellowish white band. Fore wing hyaline tinged with orange-yellow especially towards costa, the costal edge black to beyond middle, the veins below costa and a streak in discal fold beyond the cell fiery red, the veins of inner area with some black

scales; a fiery orange streak above base of vein 1 and a streak below its basal half, the inner margin and termen narrowly black-brown. Hind wing hyaline, the costal area tinged with orange, the veins and margins black, the black on termen expanding into dentate marks above and below vein 1; the underside with the costal area orange, a black streak in lower part of cell.

Hab. Peru, Yahuarmayo, 1 ♂ type. *Exp.* 38 millim.

* 756 *b*. **Trichura fumida.** (Plate XXII. fig. 30.)

Trichura fumida, Kaye, Ent. Rec. xxvi. p. 115 (1914).

♀. Head and thorax black with some metallic blue scales; abdomen black tinged with metallic green and with sublateral whitish marks on 2nd segment. Fore wing brownish hyaline, the veins and margins black; a black discoidal bar conjoined to the black on costa; the base below the cell, a fascia on inner margin, and terminal band black, the last expanding slightly below vein 7 and below vein 2. Hind wing hyaline, the veins and inner area black; an apical black patch, narrowing to a point at vein 2.

Hab. Trinidad, St. Augustine (*Guppy*), type † ♀ in Coll. Kaye. *Exp.* 32 millim.

865 *a*. **Episcepsis grisescens**, n. sp. (Plate XXII. fig. 32.)

♀. Head, thorax, and abdomen fuscous brown tinged with grey; vertex of head and shoulders with yellow spots; palpi yellow at base; legs streaked with white; ventral surface of abdomen white. Fore wing fuscous brown tinged with grey, the veins greyer; a diffused white mark beyond the cell. Hind wing fuscous brown tinged with blue-grey, the cell and a fascia below it and just beyond its lower angle white. Underside of fore wing with the white mark beyond the cell more distinct.

Hab. Venezuela, Esteban Valley, Las Quignas, 2 ♀ type. *Exp.* 34 millim.

883 *d*. **Ceramidia metallica.** (Plate XXI. fig. 32.)

Not Plate xxii. fig. 1.

946 *a*. **Chlorostola megathyris**, n. sp. (Plate XXII. fig. 33.)

♂. Head, thorax, and abdomen black; a ring at base of antennæ and spots behind them white; tegulæ with bluish white dorsal marks and lateral white spots, the patagia and prothorax with paired bluish white marks, the shoulders with white patches; palpi with some bluish white at base; coxæ with white patches; abdomen with two white dorsal points on basal segment and lateral blue

bands on 3rd to anal segments, sublateral bluish white marks on 2nd and 3rd segments and a ventral series of white bands. Fore wing black with some metallic blue irroration on costal area, three short antemedial fasciæ between the cell and inner margin, a discoidal striga and some postmedial irroration in the interspaces between vein 3 and inner margin; an antemedial hyaline streak below the cell, wedge-shaped patch in end of cell bisected by a streak in discal fold and a large postmedial patch from below costa to vein 3 interrupted by streaks on the veins and in discal fold and short streaks in the interspaces before the terminal band. Hind wing black with hyaline patches in and below the cell and on inner area and geminate spot beyond the cell; the underside with some blue on costal area.

Hab. Venezuela, Esteban Valley, Las Quignas, 1 ♂ type. *Exp.* 44 millim.

1115. **Eucereon setosa**, insert (syn.) :—

Eucereon mara, Kaye, Ent. Rec. xxvi. p. 115 (1914).

Venezuela, Caracas, type † ♂ in Coll. Kaye.

1126 *a*. **Eucereon parascyton**, n. sp. (Plate XXII. fig. 34.)

♂. Head and tegulæ grey-black, the frons white at sides, the back of head with pair of orange spots; patagia whitish edged with black, the dorsum of thorax whitish with black dorsal streak; pectus white and fuscous, the legs black with the femora streaked with white; abdomen black tinged with blue, the hair on basal segments greyish fuscous, the extremity orange-yellow, the ventral surface with sublateral whitish patches, small on terminal segments. Fore wing whitish, the basal half tinged with olive-brown, the veins and submedian fold streaked with black; some black at base; an oblique blackish antemedial shade from costa to discal fold in which there is a black streak beyond it; an oblique black discoidal bar with some black above it on costa and a shade beyond and below it; postmedial line black, curved, angled inwards at vein 2, then bent outwards to tornus, some blackish suffusion beyond it on apical area and black streaks in the interspaces from costa to vein 4; the termen with blackish bar at middle and oblique bar above tornus. Hind wing whitish suffused with fuscous black, the veins and terminal area rather darker.

Hab. Peru, Yahuarmayo, 1 ♂ type. *Exp.* 28 millim.

LIST OF UNRECOGNISED SPECIES.

Ceryx alenina, Strand, Arch. Naturg. lxxviii. 6, p. 173 (1912). Near *C. hilda*, Erhm. ..... Cameroons.

„ *macgregori*, Schultz, Philipp. Journ. Sci. iii. A, p. 29, pl. i. f. 7 (1908), ♀. ? *Streptophlebia* ... Philippines.

Cosmosoma hercynacula, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 161 (1914). Near *C. hercyna*, Druce..... Panama.

„ *melanotela*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 161 (1914). Near *C. hercyna*, Druce..... Panama.

Delphyre elachia, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 163 (1914). Near *D. hebes*, Wlk. ..... Panama.

„ *cumulosa*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 163 (1914). Panama.

Dycladia mahma, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 162 (1914). Panama.

Echeta flavicollis, Dewitz, Mitth. Münch. Ent. Ver. i. p. 94 (1877); Kirby, Cat. Lep. Het. p. 197. ? *Lymire*. Porto Rico.

Epitoxis myopsychoides & ab. *albifrons*, Strand, Arch. Naturg. lxxviii. 6, p. 182 (1902)..... Cameroons.

Eucereon exile, Strand, Arch. Naturg. lxxviii. 9, p. 146 (1912). Near *E. cœnobita*, Möschl. ..... Ecuador.

Eurota spegazzinii, Jörgensen, Zeits. Wissens. Insektenbiol. ix. p. 36, ff. 3, 4 (1913). Near *E. xanthosoma*, Hmpsn. Argentina.

Heliura banocha, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 164 (1914). Panama.

Isanthrene mathani, Roths. A. M. N. H. (8) v. p. 511 (1910). Colombia,

Loxophlebia leucothema, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 160 (1914). Near *L. imitata*, Druce..... Panama.

Lycomorpha splendens, Barnes & McD., Contr. Nat. Hist. Lep. N. Am. i. 3, p. 5, pl. i. f. 8 (1912) ..... Utah.

Macrocneme lades, cabinensis, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 162 (1914) ..... Panama.

Meganaclia (Sub-gen. *Nacliodes*) *microsippia*, Strand, Arch. Naturg. lxxviii. 6, p. 183 (1912) ..... Cameroons.

Melisoides lobata, Strand, Arch. Naturg. lxxviii. 6, pp. 192–3 (1912)..... Cameroons.

Metarctia cinereoguttata, Strand, Arch. Naturg. lxxviii. 6, p. 189 (1912). Near *M. rubripuncta*, Hmpsn. Cameroons.

„ *rubicundula* & ab. *quadrisignatula*, Strand, Arch. Naturg. lxxviii. 6, p. 187 (1912). Near *M. parachoria*, Holl. ..... Cameroons.

Myopsyche makomensis, Strand, Arch. Naturg. lxxviii. 6, p. 175 (1912) ..... Cameroons.

Myopsyche nervalis, Strand, Arch. Naturg. lxxviii. 6, p. 175 (1912). Near *M. victorina*, Plötz ... Cameroons.
Pheia stratiotes, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 160 (1914). Panama.
Phœnicoprocta paucipuncta, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 161 (1914) ..... Panama.
Ptychotrichos episcepsidis, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 163 (1914) ..... Panama.
Saurita trichopteræformis, Jörgensen, Zeits. Wissens. Insektenbiol. ix. p. 77, f. 6 (1913) ..... Argentina.
Syntomerea typica, Strand, Arch. Naturg. lxxviii. 6, p. 176 (1912) ..... Cameroons.
Syntomis alenicola, Strand, Arch. Naturg. lxxviii. 6, p. 179 (1912). Near *Amata marina*, Butl. ..... Cameroons.
„ *benitonis*, Strand, Arch. Naturg. lxxviii. 6, p. 179 (1912). Near *Amata pectoralis*, Wlk. ..... Cameroons.
„ *hyrcana*, Bang Haas, Iris, xxiv. p. 107, pl. vi. f. 2 (1912). ? *Amata persica*, Koll. ab. ..... Persia.
„ *infranigra*, Strand, Arch. Naturg. lxxviii. 6, p. 178 (1912) ..... Cameroons.
„ *lucta*, Lucas, Pr. R. Soc. Queensl. xvi. p. 73 (1901). Queensland.
„ *nigricilia*, Strand, Arch. Naturg. lxxviii. 1, p. 82 (1912). Near *Amata ceres*, Oberth. ..... Germ. E. Africa.
„ *ochropuncta*, Pag. Zoologica, xii. 29, p. 24 (1900). Bismarck Arch.
„ *orphana*, Snell. Tijd. v. Ent. xlvii. p. 57 (1904). Java.
„ *ploetzi*, Strand, Arch. Naturg. lxxviii. 6, p. 180 (1912). Near *Amata tomasina*, Butl. ..... Cameroons.
„ *tricingulata*, Culot, Bull. Soc. Ent. Fr. 1909, p. 271. ? *Amata antiochena*, Led. ab. ..... Syria.
„ *uelleburgensis*, Strand, Arch. Naturg. lxxviii. 6, p. 181 (1912). Near *Amata marina*, Butl. . Cameroons.
„ *waldowi*, Grünb. Deutsch. Ent. Zeit. 1907, p. 433, pl. iv. f. 3. Near *Amata tomasina*, Butl. ... Togoland.
Teucerateucer, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 163 (1914). Near *T. brunnea*, Hmpsn. ..... Panama.

Family ARCTIADÆ.

Subfamily NOLINÆ.

Page 4. Genus **NEONOLA**, insert :— Type.

Automala, Wlk. Journ. Linn. Soc., Zool., vii. p. 60 (1864)... *semidolosa*,

which has priority.

1. Neonola mesosticta, insert:—

Automala semidolosa, Wlk. Journ. Linn. Soc., Zool., vii. p. 60 (1864); Swinh. Cat. Het. Mus. Oxon. ii. p. 75,

which has priority; type † ♂ in Mus. Oxon.

*2 *a*. Pisara hyalospila.

Pisara hyalospila, Turner, ined.

Antennæ of male with long cilia; fore wing with large fovea in end of cell.

♂. White; head and thorax irrorated with brown scales; abdomen with the dorsal crest at base brown. Fore wing with the basal half suffused with golden brown; a blackish spot at base; an indistinct irregular subbasal line from costa to vein 1; the antemedial line blackish, curved and minutely waved; the tufts of

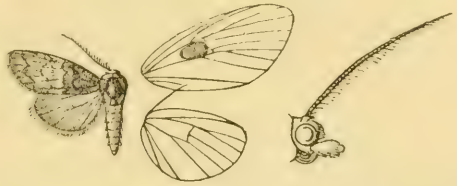

Fig. 54.—*Pisara hyalospila*, ♂. $\frac{3}{2}$.

scales at middle and upper angle of cell blackish; a medial blackish line from lower angle of cell to inner margin; a postmedial series of black points angled outwards below costa and excurved between veins 5 and 2; a subterminal line angled inwards at vein 5; then excurved to vein 2; some brown marks on termen. Hind wing tinged with brown towards tornus.

Hab. QUEENSLAND, Brisbane (*Turner*), type † ♂ in Coll. Turner.

Exp. 22 millim.

2 *b*. Pisara thyrophora, n. sp. (Plate XXII. fig. 9.)

♂. Head white; thorax white mixed with brown; fore legs and the tarsi suffused with blackish; abdomen white mixed with brown and with some blackish suffusion on dorsum towards base. Fore wing white irrorated with brown; subbasal, antemedial, and medial blackish spots on costa; a black bar in cell before the fovea and blackish spot above it; postmedial black points on veins 6 to 3 and a striga at inner margin; a maculate fuscous subterminal line, excurved below costa and at middle; a terminal series of small blackish spots. Hind wing white slightly tinged with brown especially on the veins and costa towards apex.

Hab. Formosa, Kanshirei (*Wileman*), 1 ♂ type. *Exp.* 18 millim.

2 *c*. Pisara fuscibasis.

Celama fuscibasis, Beth.-Baker, Nov. Zool. xi. p. 414, pl. v. f. 42 (1904).

♂. White; frons, tegulæ, and base of patagia irrorated with fuscous; antennæ brown, the tuft on basal joint black; legs irrorated with brown; abdomen with the basal crest black. Fore wing suffused with silver to the medial line which is almost straight; a curved antemedial line; the fan of scales in cell dark; a postmedial punctiform line arising from a small spot on costa, excurved at middle, then incurved; subterminal line angled outwards at middle and with some silvery fuscous suffusion before it and on termen. Hind wing with the terminal area tinged with silvery fuscous.

Hab. Dutch N. Guinea, Fak-fak (*Pratt*), 1 ♂; Br. N. Guinea, Dinawa, 4000′ (*Pratt*), type † ♂ in Coll. Bethune-Baker; Owgarra (*Meek*), 1 ♂. *Exp.* 22 millim.

Page 5. Under **CELAMA** insert (syn.) :—

Poliothripa, Hmpsn. Ann. S. Afr. Mus. ii. p. 311 (1902).

3 *a*. Celama thyridota.

Celama thyridota, Turner, ined.

Fore wing of male with semihyaline foveas in upper end of cell and beyond the cell above and below base of vein 6 on underside.

Head and thorax white slightly irrorated with brown; palpi at sides and antennæ tinged with brown; tibiæ and tarsi banded with fuscous; abdomen white banded with fuscous, the anal tuft tinged with ochreous. Fore wing white tinged with brown and sparsely irrorated with black; a subbasal brown spot on costa; antemedial and medial spots on costa partially edged with black scales, the former oblique and elongate on outer edge of the curved diffused antemedial black line which does not reach inner margin, the latter with traces of a waved line from it to inner margin; the postmedial

line black, punctiform from costa to vein 3, slightly angled inwards at vein 2 and outwards at vein 1; a subterminal irregular

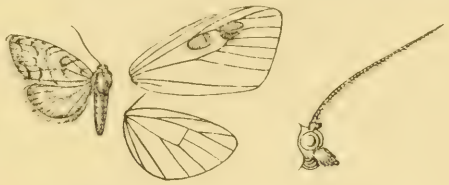

Fig. 55.—*Celama thyridota*, ♂. ¾.

diffused line bent inwards to costa. Hind wing white, slightly tinged with brown.

Hab. Queensland, Brisbane (*Turner*), 1 ♂, 1 ♀. *Exp.* 16 millim. Type † in Coll. Turner.

3 *b*. **Celama internella**, trans. from p. 13. The antennæ are bipectinate.

3 *c*. Celama flaviciliata. (Plate XXII. fig. 10.)

Celama flaviciliata, Hmpsn. A. M. N. H. (7) viii. p. 176 (1901).

♂. Head and thorax grey mixed with brown; the genital tufts ochreous. Fore wing whitish irrorated with brown and tinged with brown especially towards termen; traces of an antemedial line oblique from median nervure to inner margin; a tuft of blackish scales in middle of cell; the postmedial line represented by black points on veins 7–3, then bent inwards to below end of cell and diffused; traces of an irregular subterminal line; some brown marks on termen; cilia dark at base. Hind wing brown, the cilia yellow.

Hab. Sierra Leone (*W. G. Clements*), 2 ♂ type. *Exp.* 14 millim.

7. Celama candida, insert

No. 25. *Celama tæniata*, which has priority, and has pectinate antennæ.

7 *a*. Celama ochrolopha. (Plate XXII. fig. 11.)

Celama ochrolopha, Hmpsn. A. M. N. H. (8) viii. p. 397 (1911).

♀. Head and thorax white; palpi fuscous towards base; antennæ fuscous towards tips; pectus and legs suffused with fuscous, the tarsi ringed with white; abdomen whitish with diffused fuscous bands. Fore wing white, the inner and terminal areas tinged with

brown; a small black spot at base of costa; the costal edge black to the antemedial line with a slight subbasal striga from it; antemedial line black, curved, expanding into a small spot at costa; tufts of ochreous scales at middle of cell and on discocellulars, slightly defined by blackish; postmedial line black, angled outwards below costa, then with a diffused black band before it forming slight streaks at the veins and angled inwards at vein 2, the line incurved below vein 4; subterminal line black, angled outwards at vein 6 and excurved at middle, angled inwards at discal fold and vein 2. Hind wing white tinged with brown, the underside with diffused dark discoidal spot.

Hab. Sikhim (*Möller*), 1 ♀ type. *Exp.* 18 millim.

7 *b*. **Celama mesoscia**, n. sp. (Plate XXII. fig. 12.)

♀. Head and thorax white mixed with rufous; abdomen white tinged with brown. Fore wing pale rufous; the costal area irrorated with blackish towards base; subbasal black points on costa and median nervure; antemedial line black, excurved below costa and strongly at median nervure, then incurved, a patch of black and silvery irroration beyond it on costal area; tufts of raised dark scales in middle of cell and at upper angle, the latter placed on a broad band of black suffusion with a few silvery scales mixed before the postmedial line, which is black, excurved below costa, then sinuous, two dark points beyond it on costa; traces of a trisinuate dark subterminal line; a terminal series of black points. Hind wing white; a fine blackish terminal line from apex to vein 2; the underside irrorated with brown, a black discoidal spot.

Hab. Egypt, Beni Suef (*Dudgeon*), 1 ♀ type. *Exp.* 20 millim.

8 *a*. **Celama argyropasta**, n. sp. (Plate XXII. fig. 13.)

♀. Head and thorax white; palpi, pectus, and legs brown, the tarsi fuscous with pale rings; abdomen white suffused with brown except at base of dorsum, the ventral surface brown. Fore wing white; a red-brown fascia irrorated with black on base of costa; an oblique red-brown medial band, irrorated with black scales especially at edges and with some brilliant silver scales on it; postmedial line brown, arising from the band at costa, excurved beyond the cell, and joining the band again at vein 2; a rather diffused brown subterminal line, oblique from costa to below vein 7, angled inwards at veins 5 and 2, excurved and somewhat dentate at middle; the termen suffused with brown and irrorated with black and silvery scales; cilia red-brown mixed with whitish and black. Hind wing whitish suffused with brown.

Hab. Gold Coast, Bibianaha (*Spurrell*), 1 ♀ type. *Exp.* 14 millim.

8 *b*. **Celama niphostena**. (Plate XXII. fig. 14.)

Poliothripa niphostena, Hmpsn. Ann. S. Afr. Mus. ii. p. 312 (1902).

♂. Head and thorax white, the palpi except at tips, and antennæ except at base black, the prothorax with black patch, the metathorax with a pair of black spots; pectus and legs mostly fuscous; abdomen fuscous, whitish at base. Fore wing silvery white; a triangular subbasal black patch on costa; antemedial line waved, angled outwards in submedian fold, then oblique, a quadrate black patch beyond it on costa before the irregular medial line which ends in a black patch on inner margin connected with the postmedial line, which arises from a triangular patch on costa, is excurved and reduced to points at middle and angled inwards in submedian fold; subterminal line arising from the costal patch, strongly angled outwards at vein 7 and inwards at discal and submedian folds, the area beyond it black-brown except at apex. Hind wing whitish, the terminal area suffused with brown; the underside with the costal and terminal areas suffused with brown, a diffused brown medial line with black discoidal spot on it showing through to upperside.

♀. Hind wing entirely suffused with red-brown.

Hab. Natal, Durban (*A. T. Cooke, Leigh*), 4 ♂, 4 ♀ type. *Exp.* 24 millim.

10. **Celama cristulalis**, insert

Nola cristatula var. *kindervateri*, Schawerda, Wien. Jahresber. Entom. Ver. xviii. p. 89 (1907).

Fore wing smoky brown.—Tirol.

10 *a*. **Celama mesotherma**. (Plate XXII. fig. 15.)

Celama mesotherma, Hmpsn. A. M. N. H. (8) iv. p. 349 (1909).

Head, thorax, and abdomen white tinged with rufous; palpi with the scales fringing the joints tipped with black; tibiæ and the tarsi ringed with blackish. Fore wing white irrorated with rufous and some fuscous; a subbasal black point on costa; antemedial line brown defined on inner side by white, angled outwards below costa, then oblique; medial area suffused with rufous, the tufts of scales at middle and upper angle of cell dark with oblique elliptical brownish patches above them from costa; postmedial line blackish and somewhat punctiform, defined on outer side by white, slightly bent outwards below costa, oblique to vein 4, then incurved and again excurved above inner margin; subterminal line white defined on inner side by blackish scales with rufous suffusion before them, angled outwards at vein 7, excurved at middle and ending at tornus; a punctiform dark terminal line; cilia white mixed with some rufous and fuscous. Hind wing white tinged with ochreous brown

especially towards termen; cilia white faintly tinged with brown; the underside white, the costal area irrorated with brown.

Hab. Ceylon, Rambakkhana (*Alston*), 1 ♂, Colombo (*Mackwood*), 1 ♀ type, Maskeliya (*Mackwood*), 1 ♀; Borneo, Sarawak (*Meade-Waldo*), 1 ♀, Sandakan (*Pryer*), 1 ♀. *Exp.* 14 millim.

10 *b*. **Celama rufimixta**. (Plate XXII. fig. 16.)

Celama rufimixta, Hmpsn. A. M. N. H. (8) iv. p. 350 (1909).

Head and thorax white; palpi rufous; antennæ tinged with rufous; thorax with some rufous behind tegulæ; tarsi rufous ringed with white; abdomen white tinged with rufous. Fore wing white with some blackish irroration on basal area and before the postmedial line; antemedial, medial, and postmedial rufous patches on costa; the terminal area suffused with rufous except at apex; antemedial line white defined on inner side by rufous and on outer side by black from cell to inner margin, excurved in submedian interspace; large tufts of rufous and white scales in middle and at end of cell; an indistinct oblique waved line from lower angle of cell to inner margin; postmedial line white defined on inner side by brown, slightly bent outwards below costa and incurved below vein 4; subterminal line white slightly defined on inner side by black scales, excurved below costa, at middle and above inner margin. Hind wing white, the terminal area tinged with brown; the underside with the costal area irrorated with brown, a dark discoidal striga.

Hab. Ceylon, Yatiyantota (*Green*), 1 ♂ type, Matale (*Pole*), 1 ♀, Madulsima (*Vaughan*), 1 ♀, Wattegama (*Mackwood*), 1 ♀. *Exp.* 18 millim.

12 *a*. **Celama diplogramma**, n. sp. (Plate XXII. fig. 17.)

♀. Head and thorax pure white irrorated with a few black scales; palpi, pectus, legs and abdomen white mixed with rufous, the tarsi fuscous ringed with white. Fore wing pure white sparsely irrorated with black; an oblique elliptical brownish antemedial patch from costa conjoined to a scale-fan in the cell with the fine oblique black antemedial line arising from it; an oblique brownish postmedial patch from costa with the double black postmedial line arising from it, the inner line rather maculate and both lines with small black spots at vein 2, excurved to vein 5, then obliquely incurved; subterminal line blackish, excurved below vein 7 and at middle and incurved at discal fold and vein 2; slight blackish lines just before and on termen; cilia brownish white with a slight blackish line at middle. Hind wing white tinged with brown; the underside white, the costal area irrorated with brown, the terminal area suffused with fuscous except towards tornus, a large fuscous discoidal spot.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), 1 ♀ type. *Exp.* 20 millim.

12 *b*. Celama carilla. (Plate XXII. fig. 18.)

Celama carilla, Schaus, A. M. N. H. (8) vii. p. 355 (1911).

♂. Head and thorax white, the tegulæ tinged with rufous, the patagia and metathorax with some dark brown; palpi at sides and antennæ tinged with rufous; pectus, legs, and abdomen white tinged with rufous, the last with some dark brown at middle of dorsum. Fore wing white; the base of costal area tinged with rufous; a rufous and black oblique antemedial line slightly bent inwards to costa; a triangular rufous patch above end of cell and some black scales on discocellulars; an oblique postmedial series of black points on the veins from below costa to vein 2, then a rufous line with another line before it from vein 2 to inner margin; a subterminal reddish brown line, excurved below vein 7 and at middle; a terminal rufous line; cilia tinged with rufous. Hind wing white tinged with rufous; the underside white, the costal area irrorated with fuscous, a fuscous discoidal bar and fine terminal line.

Hab. Costa Rica, Carillo (*Schaus*), type † ♂ in U.S. Nat. Mus., Sixola R. (*Schaus*), 1 ♂. *Exp.* 12–14 millim.

*12 *c*. Celama grisescens. (Plate XXII. fig. 19.)

Celama grisescens, Beth.-Baker, Nov. Zool. xv. p. 191 (1908).

♀. Head and thorax white slightly mixed with brown; palpi and frons brown at sides; tibiæ and tarsi brown ringed with white; abdomen whitish suffused with brown. Fore wing white irrorated with black-brown, the terminal area slightly suffused with red-brown; a small triangular subbasal black patch on costa; antemedial line with black spot on costa, elongate mark in cell and slight line from cell to inner margin with black points below the cell and on vein 1; three black points on middle of costa; the fan of scales at upper angle of cell mostly black with black spot above it on costa; a rather diffused waved red-brown line from lower angle of cell to inner margin; two postmedial black points on costa with a rather diffused red-brown line with minute black streaks on the veins from just below them to inner margin, slightly angled outwards at middle and excurved to inner margin; a sinuous subterminal red-brown shade with minute dark streaks on the veins towards costa; a terminal series of minute blackish streaks with somewhat longer streak at discal fold; cilia pale rufous intersected with white. Hind wing white tinged with pale rufous especially on terminal area and cilia.

Hab. Br. N. Guinea, Owgarra (*Meek*), type † ♀ in Coll. Bethune-Baker. *Exp.* 20 millim.

12 *d*. Celama aroa. (Plate XXII. fig. 20.)

Celama aroa, Beth.-Baker, Nov. Zool. xi. p. 414, pl. v. ff. 39 & 41 (1904).

♂. Head and thorax grey-white thickly irrorated with black and dark red-brown; abdomen fuscous, greyish at base. Fore wing

grey-white tinged with brown and very roughly scaled; subbasal line represented by black striæ below costa and cell, with a triangular red-brown patch beyond it on costa; antemedial line erect, arising from a small triangular brown costal patch; the scale-fans in cell brown; a medial brown shade arising fron an irregular quadrate patch on costa; postmedial line represented by a series of nearly conjoined black spots, slightly incurved at discal fold, strongly angled inwards below vein 2, then excurved again; terminal area mostly suffused with dark brown, especially before the grey subterminal line which is slightly angled outwards at veins 7, 4, 3 then angled inwards; cilia grey with a series of brown spots on them. Hind wing fuscous brown.

Hab. Dutch N. Guinea, Fak-fak (*Pratt*), 1 ♂, Oetakwa R., Snow Mts. (*Meek*), 2 ♂; Br. N. Guinea, Dinawa, Aroa R. (*Meek*), 1 ♂. *Exp.* 24 millim.

13 *a*. **Celama leucoscopula.** (Plate XXII. fig. 21.)

Celama leucoscopula, Hmpsn. A. M. N. H. (7) xix. p. 227 (1907).

Head, thorax, and abdomen white slightly tinged with pale rufous; anal tuft pure white. Fore wing white tinged in parts with pale brown; antemedial line black, strong, angled outwards in cell, then oblique, with brownish suffusion before it; medial and postmedial oblique elliptical patches from costa; postmedial line very ill-defined, bent outwards below costa, then oblique; traces of a sinuous subterminal line. Hind wing white slightly tinged with brown and with a faint discoidal spot.

Hab. Ceylon, Ambalangoda (*J. Pole*), 1 ♂ type, Peradeniya, 2 ♀, Matale, 1 ♀, Pattalam, 1 ♀, Hambantota, 2 ♀. *Exp.* 12 millim.

14 *a*. **Celama melanoscelis**, n. sp. (Plate XXII. fig. 22.)

♂. Head and thorax white, the latter faintly tinged with brown; palpi irrorated with brown; legs irrorated with brown, the tarsi black ringed with white; abdomen white, dorsally faintly tinged with brown. Fore wing white faintly irrorated with brown; a subbasal black point on costa; the tufts of scales at middle and end of cell placed on elliptical black-brown patches from costa with two black points between them; traces of a white antemedial line, angled outwards on median nervure and with black point on it below the cell; traces of a white postmedial line, excurved below costa, then somewhat oblique; subterminal line white defined on each side by brownish suffusion, obliquely excurved below costa, excurved almost to termen at middle and ending on termen above tornus; a terminal series of slight brown spots. Hind wing white with slight brown terminal line.

♀. Fore wing with the postmedial line defined on outer side by slight brown points on the veins; hind wing with slight brown discoidal bar and the terminal area tinged with brown.

Hab. Sierra Leone (*Clements*), 1 ♂, 1 ♀; Gold Coast, Bibianaha (*Spurrell*), 1 ♂ type; S. Nigeria, Ilesha (*Humfrey*), 1 ♀; Br. E. Africa, Kikuyu (*Doherty*), 3 ♂; Natal, Durban (*Burrows*), 1 ♀. *Exp.* 14 millim.

14 *b*. **Celama samoana**, n. sp. (Plate XXII. fig. 23.)

♀. Head, thorax, and abdomen creamy white mixed with rufous; tarsi ringed with white. Fore wing creamy white mixed with rufous and slightly irrorated with brown; subbasal line indistinct, rufous, waved, with a patch of black scales at costa; an oblique elliptical rufous antemedial patch from costa, with the indistinct sinuous rufous antemedial line arising from it, a tuft of black scales beyond it in the cell; an oblique elliptical rufous postmedial patch from costa, with the slight double rufous postmedial line arising from it, excurved to vein 4, then incurved; subterminal line whitish defined on inner side by rufous suffusion, excurved below vein 7 and at middle; the termen and cilia rufous. Hind wing white with a faint rufous tinge.

Hab. Samoa Is., Apia (*Lister*), 3 ♀ type. *Exp.* 16 millim.

15 *a*. **Celama dentilinea.** (Plate XXII. fig. 24.)

Celama dentilinea, Hmpsn. A. M. N. H. (8) iv. p. 350 (1909).

♀. Head, thorax, and abdomen white tinged with ochreous brown; fore tibiæ and the tarsi fuscous brown ringed with white. Fore wing white tinged with ochreous brown and slightly irrorated with fuscous; antemedial line blackish defined on inner side by white, curved, angled outwards in submedian fold; the tufts of scales at middle and upper angle of cell dark with oblique elliptical brownish patches above them from costa; a waved dark line from lower angle of cell to inner margin; postmedial line blackish, punctiform, oblique from costa to vein 6, then inwardly oblique; terminal area suffused with ochreous brown; the subterminal line white, strongly and evenly dentate; a brown terminal line; cilia white tinged with ochreous brown. Hind wing white, the costal area slightly tinged with ochreous brown.

Hab. Ceylon (*Alston*), 1 ♀ type. *Exp.* 18 millim.

17 *a*. **Celama omphalota.** (Plate XXII. fig. 25.)

Celama omphalota, Hmpsn. A. M. N. H. (7) xi. p. 341 (1903).

♂. White; palpi and antennæ pale reddish brown; patagia with rufous spots; legs tinged with fuscous; abdomen tinged with pale rufous. Fore wing tinged with pale rufous in places

especially on basal half of inner area and on termen; the tufts of raised scales in cell near base and at middle large, silvery and black mixed; the antemedial line only visible from cell to inner margin and obliquely curved; a pale rufous spot on middle of costa; the postmedial line punctiform, bent outwards below costa and at vein 3 strongly recurved; a trisinuate subterminal line. Hind wing tinged with pale reddish brown.

Hab. S. Nigeria, Old Calabar (*Crompton*), 2 ♂ type. *Exp.* 16 millim.

17 *b*. **Celama enphæa.** (Plate XXII. fig. 26.)

Celama enphœa, Hmpsn. A. M. N. H. (7) viii. p. 177 (1901).

♂. Head, thorax, and abdomen grey irrorated with brown. Fore wing grey-brown thickly irrorated with brown and black; faint traces of an oblique antemedial line from costa to submedian fold; the tufts of scales at middle and end of cell fuscous; the postmedial line black, minutely dentate, incurved below vein 3; a fine dark terminal line. Hind wing grey-brown with fine dark terminal line.

Hab. W. China, Moupin (*Kricheldorff*), 1 ♂ type. *Exp.* 20 millim.

18 *a*. **Celama furvitincta**, n. sp. (Plate XXIII. fig. 1.)

♂. Head, thorax, and abdomen white tinged with rufous; tarsi dark brown ringed with white. Fore wing white tinged with rufous and irrorated with black; antemedial line rather diffused, blackish, slightly excurved below costa and incurved in cell; tufts of blackish scales in upper part of middle of cell and at upper angle; two blackish points on costa above end of cell; postmedial line black, punctiform, more continuous on inner area, slightly angled inwards at discal fold and incurved below vein 4; a subterminal series of rather diffused black points, oblique from costa to below vein 7, and slightly incurved at veins 5 and 2; a terminal series of small rather triangular black spots; cilia with a series of blackish spots near base and a fine line near tips. Hind wing white tinged with red-brown, the veins with a few black scales.

Hab. Sierra Leone (*Clements*), 2 ♂ type. *Exp.* 18 millim.

18 *b*. **Celama mesonephele**, n. sp. (Plate XXIII. fig. 2.)

♂. Head white; palpi irrorated with fuscous; antennæ brownish; thorax white irrorated with black; pectus and legs tinged with brown, the tarsi black ringed with white; abdomen white tinged with red-brown. Fore wing white sparsely irrorated with blackish and with patches of thick black irroration on basal costal area and in below and above end of cell; antemedial line rather diffused, black, angled inwards on the veins and oblique below submedian fold; tufts of blackish scales in end of cell and at upper angle; an excurved postmedial series of black points on

the veins from costa to vein 2 with short streaks of black scales before it on veins 7 to 3, below vein 2 strongly incurved; a diffused brownish subterminal line, oblique and with slight black streaks on the veins from costa to vein 6, angled inwards at veins 5 and 2; a terminal series of blackish points with a slight brown shade before them. Hind wing white slightly tinged with reddish brown; the underside with the costal area irrorated with dark brown, a small brown discoidal spot.

Hab. Gold Coast, Bibianaha (*Spurrell*), 1 ♂ type. *Exp.* 20 millim.

18 *c*. **Celama megasema**, n. sp. (Plate XXIII. fig. 3.)

♀. Head, thorax, and abdomen white tinged with reddish brown; antennæ and palpi fuscous brown; anal tuft large and ochreous. Fore wing white sparsely irrorated with blackish, the medial area except towards costa and the terminal area tinged with red-brown; a small blackish antemedial spot on costa and line from cell to inner margin angled inwards at vein 1; a large round tuft of black scales in upper part of cell towards extremity and a blackish mark below the costa at end of cell; postmedial line blackish, punctiform, bent inwards below costa and again below vein 3; a rather diffused blackish subterminal line, excurved below costa, excurved and somewhat dentate at middle, and excurved below vein 3; a terminal series of small blackish spots; cilia white mixed with blackish. Hind wing white tinged with brown; the underside whiter.

Hab. Gold Coast, Bibianaha (*Spurrell*), 2 ♀ type. *Exp.* 14 millim.

19 *a*. **Celama chionæcesis**, n. sp. (Plate XXIII. fig. 4.)

♀. Head and thorax pure white; antennæ tinged with brown except towards base; palpi and legs irrorated with red-brown; abdomen white tinged with rufous. Fore wing pure white slightly irrorated with brown; an oblique subbasal brown bar from costa with two slight rufous marks beyond it; antemedial line represented by some brown scales and with small brown spot at costa, excurved below costa, then sinuous; a tuft of brown scales in upper extremity of cell with a curved striga above it from costa; postmedial line with small brown spot at costa, then rather punctiform, excurved to vein 3, then incurved, a small brown spot beyond it on costa; subterminal line rufous, maculate, excurved below costa and at middle; a series of rufous marks on the extremities of the veins before the fine rufous terminal line. Hind wing white with slight brown discoidal striga and faint brown tinge on terminal area to vein 2.

Hab. Dutch N. Guinea, Oetekwa R., Snow Mts. (*Meek*), 1 ♀ type. *Exp.* 18 millim.

*19 *b*. Celama acutula. (Plate XXIII. fig. 5.)

Nola acutula, Püngl. Iris, xv. p. 159, pl. vi. f. 8 (1902); Seitz. Gr. Schm. pal. ii. p. 46, pl. 10 *e*.

Brownish white; palpi and legs irrorated with black. Fore wing suffused with brown and irrorated with fuscous; a strong black antemedial line angled outwards below costa then obliquely curved; the tufts of scales at middle and upper angle of cell brownish; traces of a medial line excurved at middle; postmedial line prominent, bent outwards below costa, excurved to vein 4 then incurved; an indistinct diffused subterminal line excurved below costa and at middle; a fine dark terminal line. Hind wing semihyaline brownish white; a dark discoidal lunule.

Hab. Mongolia, Aksu, type † ♂, ♀ in Coll. Püngeler. *Exp.* 26 millim.

*20 *a*. Celama semirufa. (Plate XXIII. fig. 6.)

Celama semirufa, Dogn. Hét. Nouv. Am. Sud, vii. p. 9 (1914).

♂. Head and thorax pure white; palpi dark brown except at tips; antennæ dark brown except basal joint; pectus and legs red-brown, the tarsi ringed with white; abdomen red-brown with some white at base of dorsum. Fore wing with the basal area pure white with erect outer edge; a red-brown patch at base of costa followed by a point; the rest of wing red-brown with some dark irroration; a tuft of black and silvery scales in middle of cell and a bar on discocellulars; a postmedial series of black points on the veins and some white points on apical part of costa. Hind wing white tinged with red-brown; a small dark discoidal spot and fine terminal line; the underside with the costal area irrorated with red-brown, the discoidal spot larger.

Hab. Colombia (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 16 millim.

*20 *b*. Celama dimera. (Plate XXIII. fig. 7.)

Celama dimera, Dogn. Mém. Soc. Ent. Belg. xix. p. 123 (1912).

♀. Head and thorax white; palpi ochreous; pectus and legs tinged with ochreous brown, the tarsi black ringed with white; abdomen white suffused with ochreous brown. Fore wing with the basal half white, the costa and terminal half reddish brown irrorated with black; the white area bounded by a diffused obliquely curved black line with some silvery scales beyond it; a minutely waved blackish postmedial line oblique to vein 6, then erect, and two similar less distinct subterminal lines; a terminal series of small blackish spots. Hind wing pale brown, the cell and inner area rather whiter.

Hab. Fr. Guiana, Nouveau Chantier (*Le Moult*), type † ♀ in Coll. Dognin. *Exp.* 16 millim.

21 *a*. Celama fovifera.

Celama fovifera, Hmpsn. A. M. N. H. (7) xi. p. 342 (1903).

Antennæ of male ciliated; fore wing with an elongate hyaline fovea in end of cell.

♂. Pure white; palpi tinged with black at sides; legs irrorated with black, the tarsi black ringed with white. Fore wing with curved black subbasal line from cell to median nervure with brown and black scale-fan on its outer edge in the cell; an interrupted black antemedial line, oblique from costa to below the cell where it is angled, obsolete below submedian fold, with a large brown and black

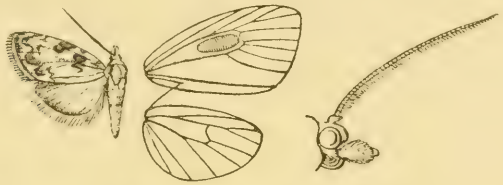

Fig. 56.—*Celama fovifera*, ♂. ♀.

scale-fan on its outer edge in the cell; a similar scale-fan at upper angle of cell with some black irroration below it at lower angle and a black patch above it on costa; an interrupted, irregularly and minutely dentate postmedial line excurved from costa to vein 4, then incurved; a trisinuate subterminal line with black suffusion in its curves; some brown suffusion on termen. Hind wing with the termen slightly tinged with fuscous.

Hab. Queensland, Townsville (*Dodd*), 1 ♂ type. *Exp.* 16 millim.

23 *a*. Celama nephodes, n. sp. (Plate XXIII. fig. 8.)

Head, thorax, and abdomen white mixed with brown; tarsi black-brown ringed with white; anal tuft of male pure white. Fore wing white thickly irrorated with fuscous brown; the costal area brown towards base; a curved antemedial dark band with tuft of raised scales on it in the cell; some black-brown points on medial part of costa; a dark band before the postmedial line with tuft of raised scales on it at upper angle of cell; postmedial line blackish, oblique towards costa, slightly incurved at discal fold and incurved at vein 2, some white points beyond it on costa; subterminal line rather diffused, white, excurved below costa and at middle and incurved at discal fold and vein 2; a rather maculate dark terminal line. Hind wing white tinged with brown; the underside white, the costal area irrorated with black, a blackish discoidal striga.

Ab. 1. Fore wing with the basal area whiter, the antemedial band not extending to inner margin, the inner part of medial area pure white and narrowing to costa.

Hab. Formosa, Kanshirei (*Wileman*), 1 ♂, 2 ♀ type. *Exp.* 16 millim.

*30 *a*. Celama cruegeri.

Nola kruegeri, Turati, Zeitsch. Wissens. Insektenbiol. vii. p. 212, fig. 5 (1911).

Head and thorax grey; antennæ yellowish; abdomen fuscous. Fore wing grey, the medial and terminal areas suffused with dull brown; a tuft of raised grey scales in the cell near base and brown tufts at middle of cell and on discocellulars; antemedial line blackish, excurved below costa, then oblique; postmedial line dark, excurved to vein 4, then incurved, some dark points beyond it on costa; subterminal line represented by the contrast between the postmedial and terminal areas, excurved below costa and at middle; cilia with fine white line at base followed by dark points. Hind wing whitish tinged with fuscous; a dark discoidal lunule.

Hab. Sardinia, Cagliari. *Exp.* 18 millim. This species is unknown to me.

30 *b*. Celama microphila. (Plate XXIII. fig. 9.)

Sorocostia microphila, Turner, Trans. R. Soc. S. Austr. xxiii. p. 16 (1899).

Brownish grey; head and thorax with fuscous mixed; palpi blackish at sides; tarsi black with whitish rings at the joints; abdomen with blackish bands. Fore wing with obscure dark patch at base of costa; a diffused antemedial waved line excurved below costa, then oblique; the tufts at middle and end of cell dark; the postmedial line black, strongly bent outwards from below costa to vein 4 where it is angled, then retracted and with a diffused fuscous line on its inner edge, angled outwards to inner margin; an ill-defined subterminal line angled outwards at veins 6 and 4 and inwards to costa and at discal fold; a terminal series of black points. Hind wing pale fuscous with fine pale line at base of cilia.

Hab. Queensland, Brisbane, 1 ♂, type † ♀ in Coll. Turner. *Exp* 14 millim.

37. Celama cicatricalis, insert:—

Nola cicatricalis, ab. *leukosticta*, Schawerda, Verh. zool.-bot. Ges. Wien, lxi. p. 87 (1911).

Fore and hind wings whiter.—Hungary.

*39 *a*. **Celama crambiformis.** (Plate XXIII. fig. 10.)

Nola crambiformis, Rebel, Iris, xv. p. 223 (1902); Seitz, Gr. Schm. pal. ii. p. 44.

♀. Head, thorax, and abdomen white; palpi very long with some black-brown at sides. Fore wing white irrorated with black-brown and some red-brown; traces of an antemedial line, oblique below the cell; postmedial line black-brown, acutely bent outwards below costa, then oblique and straight, a broad band of black-brown irroration and suffusion before it; the terminal area and cilia more thickly irrorated with black-brown and red-brown. Hind wing white slightly tinged and irrorated with brown. Underside white, the fore wing and costal area of hind wing tinged and irrorated with brown.

Hab. Russia, Urals, Orenburg, type † ♀ in bad condition in Mus. Vienna. *Exp.* 18 millim.

39 *b*. **Celama socotrensis.** (Plate XXIII. fig. 11.)

Celama socotrensis, Hmpsn. A. M. N. H. (7) viii. p. 177 (1902).

Brownish white irrorated with brown; palpi blackish at sides; tarsi banded with black. Fore wing with distinct blackish antemedial line angled inwards to costa and with a dark mark before it in submedian interspace; the tufts small and dark, the tuft in cell confluent with the antemedial line; the postmedial line acutely angled outwards below costa, less acutely at veins 4 and 1 and angled inwards at discal and submedian folds, a less distinct line parallel to its inner side; the subterminal line angled outwards at vein 6 and excurved at middle. Hind wing whitish tinged with fuscous brown.

Hab. Sokotra, Jena-agahan, 1 ♂ type, Adho Dimellus, 3 ♀, Hadibu plain, 1 ♀ (*O. Grant*). *Exp.* 14–16 millim.

42. **Celama squalida**, insert (syns.):—

No. 43. *Celama pumila*.

Manoba grisescens, Roths. Nov. Zool. xix. p. 231 (1912).

Br. N. Guinea, Milne Bay, type † ♂ in Coll. Rothschild, and del. *Rœselia fraterna* and *Sorocostia desmotes*.

42 *a*. **Celama fraterna.** (Plate XXIII. fig. 12.)

Rœselia fraterna, Moore, P. Z. S. 1888, p. 393.
Sorocostia desmotes, Turner, Trans. R. Soc. S. Austr. xxiii. p. 15 (1899).

Larger than *C. squalida* and with the postmedial line of fore wing entire and not punctiform.

Hab. Kashmir (*Pilcher*), 1 ♂; Punjab, Kulu (*Pilcher*), 2 ♀, Kangra Valley (*Hocking, Dudgeon*), 3 ♀ type, Simla (*Pilcher*), 1 ♂, 3 ♀; Queensland, Brisbane (*Turner*), 2 ♀. *Exp.* 16–18 millim.

43 *a*. **Celama cretacea.** (Plate XXIII. fig. 13.)

Celama cretacea, Hmpsn. A. M. N. H. (7) viii. p. 177 (1901).

♀. White tinged with reddish brown; palpi rufous at sides, tarsi banded with rufous. Fore wing with the costal edge towards base and some spots on costa rufous; the tufts of scales rufous; a fine dark antemedial line angled outwards to the tuft in middle of cell, then sinuous; the postmedial line punctiform, bent outwards below costa, acutely angled outwards at vein 4, then strongly incurved; an indistinct irregular subterminal line angled outwards at vein 6 and excurved at middle. Hind wing white slightly tinged with brown towards termen.

Hab. Bombay, 4 ♀ type; Ceylon, Hambantota (*Pole*), 1 ♀. *Exp.* 14 millim.

46 *a*. **Celama melaleuca.** (Plate XXIII. fig. 14.)

Celama melaleuca, Hmpsn. A. M. N. H. (7) viii. p. 177 (1901).

♀. Silvery white; palpi black at base; legs streaked with black. Fore wing with prominent black antemedial line, slightly waved and angled outwards on subcostal and median nervures; an elliptical black medial patch on costa with a dentate blackish line from near its lower extremity excurved to vein 4, then oblique, dentate and partly confluent with the postmedial line which is prominent, black, minutely dentate, excurved from costa to vein 4, then incurved; an irregularly dentate subterminal line bent inwards to costa on which there is a black spot beyond it; a terminal series of rather diffused black spots. Hind wing fuscous with indistinct discoidal spot.

Hab. Br. E. Africa, Uganda Ry., Mile 478 (*Betton*), 1 ♀ type. *Exp.* 26 millim.

*50 *a*. **Celama tigranula.** (Plate XXIII. fig. 15.)

Nola tigranula, Püng. Iris, xv. p. 141, pl. vi. fig. 9 (1902); Seitz, Gr. Schm. pal. ii. p. 46, pl. 10 *d*.

♀. Head and thorax pure white; palpi irrorated with fuscous; antennæ ringed with fuscous; pectus, legs and abdomen white mixed with fuscous. Fore wing pure white; costal edge brownish towards base; antemedial line represented by some black scales below costa, on median nervure and vein 1; some brown points on medial part of costa; the tuft at middle of cell white, the one at upper angle white with some black and red-brown scales on and above it; postmedial line represented by a series of black points, bent outwards below costa, excurved to vein 4, then incurved; a brown spot on costa towards apex. Hind wing fuscous, the cilia white. Underside of fore wing fuscous with two white points on costa towards apex; hind wing white irrorated with fuscous, a dark discoidal lunule.

Hab. Armenia, Kasikoporan (*Korb*), type † ♀ in Coll. Püngeler. *Exp.* 26 millim.

51 *a*. Celama phæocraspis. (Plate XXIII. fig. 16.)

Celama phæocraspis, Hmpsn. A. M. N. H. (8) iv. p. 351 (1909).

♂. Head and thorax white mixed with some fuscous; palpi at sides and antennæ except basal joints blackish; legs blackish, the tarsi ringed with white; abdomen pale ochreous. Fore wing grey-white irrorated with fuscous, the terminal area suffused with fuscous; a blackish subbasal bar from costa to median nervure; antemedial line black, expanding into a small spot at costa, strongly excurved from below costa to vein 1 where it is angled inwards, a blackish patch beyond it in cell; a black point at upper angle of cell; postmedial line black, strongly bent outwards and obsolescent below costa, then somewhat punctiform, very slightly incurved at vein 6 and strongly below vein 4, some black points beyond it on costa; subterminal line indistinct, dark, oblique from costa to vein 7 where it is angled outwards, excurved at middle and slightly angled inwards at discal and submedian folds, the area beyond it suffused with fuscous except at costa; cilia whitish with a series of small fuscous spots. Hind wing white faintly tinged with brownish ochreous.

♀. Fore wing with the terminal area much less suffused with fuscous, the subterminal line maculate, a terminal series of small blackish spots.

Hab. S. Nigeria, Olokemeji (*Dudgeon*), 1 ♂ type; Br. E. Africa, Ndimu (*Betton*), 1 ♀. *Exp.* ♂ 16, ♀ 20 millim.

*53 *a*. Celama albirufa. (Plate XXIII. fig. 17.)

Celama albirufa, Schaus, Pr. U.S. Nat. Mus. xxix. p. 194 (1905).

♂. Head, thorax, and abdomen white; palpi tinged with brown at sides; tarsi brownish ringed with white. Fore wing white slightly irrorated with rufous, the costal and terminal areas suffused with rufous; antemedial line indistinct, punctiform, very oblique from costa to submedian fold, then inwardly oblique; the tufts of scales small, rufous; an oblique rufous shade from lower angle of cell to inner margin; postmedial line strongly bent outwards below costa, then oblique, punctiform, angled inwards in submedian fold, some white points beyond it on costa; traces of a white subterminal line; some dark rufous points on termen except towards tornus. Hind wing white, the underside with the costal area irrorated with rufous.

Hab. Fr. Guiana, St. Jean Maroni, type † ♂ in U.S. Nat. Mus. *Exp.* 14 millim.

*54 *a*. Celama obliquata.

Celama obliquata, Barnes and Mc.D., Contr. Nat. Hist. Lep. N. Am. ii. 4, p. 166, pl. i. f. 2 (1913).

♂. Dull grey. Fore wing with straight inwardly oblique fuscous antemedial line; postmedial line fuscous, inwardly oblique, very slightly excurved beyond the cell, with dark points on the veins; subterminal line pale, waved, incurved at discal and submedian folds; a terminal series of black points. Hind wing fuscous, whitish towards base. Underside fuscous, the hind wings pale at base.

Hab. U.S.A. Florida, Everglade. *Exp.* 16 millim. This species is unknown to me.

61 *a*. Nola fovifera.

Nola fovifera, Hmpsn. A. M. N. H. (8) viii. p. 397 (1911).

Fore wing of male with triangular fovea in upper extremity of cell.

Head and thorax grey-white mixed with fuscous; palpi black at sides, whitish above; antennæ blackish; legs black, the tarsi ringed with white; abdomen grey-white with obscure dorsal brownish bands. Fore wing pale grey irrorated with black; a blackish mark on costa near base; antemedial line black, slightly angled outwards below costa, then oblique and minutely waved, bent outwards above inner margin, a black patch beyond it

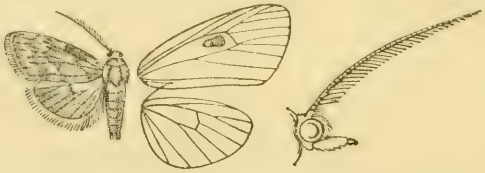

Fig. 57.—*Nola fovifera*, ♂. ¾.

on costa; postmedial line represented by a series of black points on the veins, excurved below costa and between veins 5 and 3, then incurved; a diffused subterminal line with dark streaks on the veins, excurved below costa and at middle; a terminal series of black points; cilia with fuscous spots near base and fine line near tips. Hind wing whitish tinged with brown; the underside with the costal area irrorated with black, a fuscous discoidal bar.

Hab. Gold Coast, Bibianaha (*Spurrell*), 2 ♀, Kumasi (*Whiteside*), 1 ♀; N.E. Rhodesia, Fort Jameson (*Neave*), 1 ♂ type. *Exp.* 20 millim.

61 *b*. **Nola ochrographa.** (Plate XXIII. fig. 18.)

Nola ochrographa, Hmpsn. A. M. N. H. (7) xix. p. 227 (1907).

♂. Head and tegulæ ochreous white mixed with some brown; palpi and sides of frons black-brown; thorax brown mixed with black; abdomen greyish suffused with black-brown, the anal tuft tinged with ochreous. Fore wing greyish suffused and thickly irrorated with dark brown, the medial area suffused with red-brown below the cell and on inner side of postmedial line; antemedial line black defined by ochreous white on inner side, acutely angled outwards in cell, then very oblique and ending at vein 1; the tuft of scales in cell blackish, the tuft at upper angle greyish with a slight black line on its inner edge from costa, angled outwards below costa; postmedial line ochreous white defined by black on inner side, very oblique and almost straight; subterminal line ochreous white, arising from costa just beyond the postmedial line, excurved to vein 6, then straight; a fine dark terminal line; cilia fuscous with a fine pale line at base. Hind wing ochreous white, the costal and terminal areas suffused with brown except towards tornus; the underside irrorated with dark brown, a dark discoidal lunule.

Hab. Uganda, Entebbe (*Minchin*), 2 ♂ type. *Exp.* 22 millim.

61 *c*. **Nola mesoscota.** (Plate XXIII. fig. 19.)

Nola mesoscota, Hmpsn. A. M. N. H. (3) iv. p. 351 (1909).

♀. Head and thorax whitish mixed with rufous and fuscous; tarsi fuscous slightly ringed with white; abdomen grey tinged with rufous and mixed with fuscous. Fore wing rufous mixed with some grey and irrorated with fuscous, the medial area before the postmedial line and the terminal area suffused with fuscous; a somewhat diffused blackish antemedial line, angled outwards below costa, then inwardly oblique; slight tufts of dark scales in middle of cell and on discocellulars; postmedial line blackish, angled outwards below costa and slightly at vein 4, then incurved, some grey and fuscous marks beyond it on costa; subterminal line whitish defined on inner side by blackish suffusion, angled outwards below apex, then oblique and ending at tornus; cilia with a whitish line at base. Hind wing whitish tinged with fuscous brown, the cilia with a whitish line at base; the underside whitish thickly irrorated with brown, a blackish discoidal bar.

Hab. Transvaal, White R. (*Cooke*), 2 ♀ type. *Exp.* 24 millim.

61 *d*. **Nola endoscota**, n. sp. (Plate XXXII. fig. 35.)

♂. Head, tegulæ, and patagia white with a few brown scales, the dorsum of thorax white tinged with ochreous brown; antennæ dark brown ringed with ochreous white; sides of frons and palpi

dark brown, the latter whitish above; pectus and legs whitish tinged with ochreous brown, the tarsi dark brown slightly ringed with white; abdomen dark brown, the base, anal tuft, and ventral surface ochreous white. Fore wing ochreous white tinged with red-brown and irrorated with dark brown; some dark brown on costa towards base and on medial costal area; traces of a dark antemedial line, oblique below submedian fold; a tuft of raised dark scales in the cell towards upper extremity; a dark brown shade from lower angle of cell to inner margin before the dark brown oblique postmedial line, which arises below the costa, is slightly excurved at vein 5, then slightly incurved; a rather diffused dark brown subterminal line, excurved below vein 7 and at middle; the termen and cilia suffused with dark brown. Hind wing whitish strongly suffused with dark brown, the cilia with a fine pale line at base. Underside whitish; fore wing strongly suffused with brown; hind wing irrorated with brown and with a small dark discoidal spot.

Hab. Gold Coast, Bibianaha (*Spurrell*), 1 ♀ type. *Exp.* 20 millim.

61*e*. **Nola perfusca**. (Plate XXIII. fig. 20.)

Nola perfusca, Hmpsn. A. M. N. H. (8) viii. p. 398 (1911).

♂. Head, thorax, and abdomen fuscous brown mixed with some grey. Fore wing fuscous brown mixed with grey and irrorated with black; traces of an oblique sinuous antemedial line; a blackish spot in middle of cell; faint traces of sinuous postmedial and subterminal lines. Hind wing fuscous brown slightly irrorated with grey.

♀. Greyer, especially the head, thorax, and fore wing, the last without the blackish spot in cell.

Hab. Gold Coast, Bibianaha (*Spurrell*) 1 ♀; S. Nigeria, Lagos (*Lamborn*), 1 ♂, 1 ♀ type. *Exp.* ♂ 16, ♀ 18 millim.

Cocoon brown, formed several together on a leaf.

61*f*. **Nola maia**. (Plate XXIII. fig. 21.)

Nola maia, Schaus, A. M. N. H. (8) ix. p. 36 (1912).

♂. Head, thorax, and abdomen brown mixed with grey. Fore wing brown mixed with grey; an oblique antemedial band of blackish suffusion with some fulvous beyond it on inner area; two blackish discoidal points; postmedial line blackish defined on outer side by white, minutely waved, excurved to vein 4, then incurved; an obscure sinuous subterminal line. Hind wing whitish suffused with brown; the underside whitish tinged with brown and irrorated with black, a black discoidal spot, a rather diffused blackish postmedial line excurved to vein 4, then incurved.

Hab. Costa Rica, Mt. Poas (*Schaus*), 1 ♂. *Exp.* 18 millim.

63 *a*. **Nola mesotherma**, n. sp. (Plate XXIII. fig. 22.)

♀. Head and thorax white, the latter with a large patch of black-brown suffusion on dorsum; palpi, antennæ, pectus, and legs red-brown; abdomen white suffused with red-brown. Fore wing white sparsely irrorated with black-brown and silvery scales, the basal costal area, the area between the antemedial and medial lines, and the terminal area except towards apex suffused with red-brown; antemedial line dark brown, sinuous, oblique to submedian fold, then inwardly oblique; medial line dark brown, oblique to lower angle of cell, then erect, and diffused below vein 2; tufts of blackish and silvery scales in upper part of middle of cell and at upper angle; postmedial line dark brown, minutely waved, angled inwards at discal fold and incurved in submedian interspace; subterminal line rather diffused, dark brown, waved, oblique to vein 6, and angled inwards at discal fold; cilia fuscous brown. Hind wing pale reddish brown; the underside with the costal area irrorated with blackish, the inner area whitish tinged with brown.

Hab. Gold Coast, Bibianaha (*Spurrell*), 1 ♀ type. *Exp.* 24 millim.

*63 *b*. **Nola angola**. (Plate XXIII. fig. 23.)

Nola angola, Beth.-Baker, A. M. N. H. (8) vii. p. 534 (1911).

♀. Head and thorax white with a few reddish brown scales; palpi, a bar across frons, and antennæ towards tips brown; pectus and legs suffused with brown; abdomen white slightly suffused with brown. Fore wing white; the basal half of costal area suffused with brown, the costal edge blackish; a slight curved antemedial line; the medial area suffused with brown with some silvery scales above and below median nervure, conjoined by brown suffusion except from costa to vein 5 with the dark brown terminal area narrowing to apex; a slight punctiform black postmedial line, erect from costa to vein 5, then oblique to vein 2 where it terminates; an indistinct dark subterminal line, oblique to vein 7, incurved at discal fold and excurved at middle. Hind wing white tinged with brown especially on terminal area.

This may be the female of *N. chionea*.

Hab. N. Angola, N'Dalla Tando (*Ansorge*), type † ♀ in Coll. Bethune-Baker. *Exp.* 24 millim.

63 *c*. **Nola chionea**. (Plate XXIII. fig. 24.)

Nola chionea, Hmpsn. A. M. N. H. (8) viii. p. 398 (1911).

♂. Head and thorax white; palpi and antennæ except towards base ochreous mixed with blackish; pectus and legs suffused with ochreous brown, the fore legs blackish, the tarsi ringed with white; abdomen white suffused with ochreous brown. Fore wing white, the terminal area suffused with ochreous brown except at apex;

an ochreous brown patch at base of costa, a medial patch from costa to median nervure and another from vein 2 to inner margin with some silvery scales on them; a postmedial series of points on the veins, incurved below vein 4, and below vein 2 to the inner medial patch; an indistinct white subterminal line excurved below vein 7 and at middle; some brownish spots on costa towards apex and a series at extremities of the veins; cilia ochreous mixed with brown. Hind wing white, the cilia tinged with ochreous brown except towards tornus; the underside with the costal area thickly irrorated with brown, a dark discoidal spot.

Hab. Gold Coast, Bibianaha (*Spurrell*), 1 ♂; S. Nigeria, Ilesha (*Humfrey*), 1 ♂ type. *Exp.* 18 mllim.

63 *d.* **Nola rufa**, Hmpsn., trans. from *Celama*, no. 6.

*63 *e.* **Nola niveibasis.**

Nola niveibasis, D. Jones, Trans. Ent. Soc. 1914, p. 7, pl. i. f. 19.

♀. Head and thorax pure white; antennæ brownish except towards base; palpi brown except at tips; pectus and legs fuscous and white, the tarsi fuscous ringed with white; abdomen white suffused with brown. Fore wing with the basal half pure white with a fuscous patch on basal part of costa, the terminal half red-brown irrorated with fuscous; medial line blackish, defining the white area, angled outwards to lower angle of cell, some black suffusion beyond it on costa; postmedial line diffused, black, somewhat dentate, excurved to vein 3 where it is angled inwards, then again excurved, some whitish suffusion beyond it on costal area; subterminal line indistinct, diffused, blackish, oblique towards costa and excurved below vein 7 and at middle. Hind wing whitish suffused with red-brown; the underside with blackish discoidal bar.

Hab. S. Brazil, Castro Paraná (*D. Jones*), type † ♀ in Coll. D. Jones. *Exp.* 20 millim.

*63 *f.* **Nola mesocyma.** (Plate XXIII. fig. 25.)

Nola mesocyma, Dogn. Mém. Soc. Ent. Belg. xix. p. 123 (1912).

♂. Head and thorax white, the head and tegulæ suffused with rufous, the prothorax with blackish patch; palpi with some black; tarsi brown ringed with white; abdomen white suffused with reddish brown. Fore wing white, the costa irrorated with red-brown, the terminal area suffused with rufous; a black medial line oblique to vein 3, then dentate, a tuft of rufous scales beyond it at upper angle of cell; postmedial line black, oblique below costa and incurved below vein 4; subterminal line black, rather punctiform, oblique to vein 6, angled inwards at discal fold, and excurved at middle. Hind wing white, the termen tinged with reddish brown,

broadly towards apex; cilia reddish brown except at base; the underside with the costal area irrorated with black.

Hab. Fr. Guiana, Maroni, La Forestière (*Le Moult*), type † ♂ in Coll. Dognin. *Exp.* 12 millim.

*63 *g*. **Nola chia.** (Plate XXIII. fig. 26.)

Acontia chia, Holl. Psyche, vii. p. 128, pl. v. f. 22 (1894).

♀. Head and thorax pure white; palpi red-brown at sides; pectus, legs, and abdomen ochreous tinged with brown, the tarsi brown ringed with white. Fore wing pure white irrorated with a few brown scales; a red-brown patch at base of costa; a triangular red-brown patch at middle of costa defined by dark brown; a small dark-brown postmedial mark on costa with traces of the punctiform postmedial line arising from it, slightly incurved at vein 1; terminal area and cilia red-brown mixed with yellowish except at apex; a terminal series of minute dark streaks. Hind wing yellowish suffused with red-brown; the underside whitish tinged with red-brown, the costal area irrorated with brown, a brown discoidal spot.

Hab. Congo, Bule Country (*Good*), type † ♀ in Coll. Holland. *Exp.* 26 millim.

64 *a*. **Nola albifurca**, n. sp. (Plate XXIII. fig. 27.)

♀. Head, thorax, and abdomen white mixed with grey. Fore wing white suffused with grey and irrorated with a few black scales, the medial inner area and middle of terminal area suffused with rufous; an indistinct oblique whitish subbasal line from below costa to median nervure, with some raised black scales below it in submedian fold; an obliquely curved white fascia from middle of submedian fold to inner margin beyond middle joined by an oblique white line from median nervure at origin of vein 2; an oblique whitish shade from costa beyond middle to below apex; a whitish subterminal line defined on inner side by diffused black scales, arising at vein 5, excurved at middle, angled inwards at vein 3, then excurved to tornus. Hind wing white, the terminal half tinged with reddish brown from costa to submedian fold; the underside white slightly tinged with rufous.

Hab. Philippines, Manila (*Ledyard*), 1 ♀ type. *Exp.* 20 millim.

64 *b*. **Nola sabulosa.** (Plate XXIII. fig. 28.)

Rœselia sabulosa, Schaus, A. M. N. H. (8) vii. p. 356 (1911).

♀. Head and thorax whitish tinged with rufous; palpi tinged with fuscous at sides; abdomen brownish white. Fore wing whitish tinged with rufous and irrorated with black; traces of an oblique blackish antemedial line bent inwards to costa; a tuft of black scales in middle of cell; a blackish spot at middle of costa;

an indistinct oblique minutely dentate black postmedial line; subterminal line represented by some slight dark marks; a terminal series of black points; cilia with blackish points at tips. Hind wing white; a slight brownish spot at upper angle of cell; the costa towards apex tinged with reddish brown; a fine reddish brown terminal line; the underside with the costal area tinged with reddish brown and irrorated with fuscous, a fuscous discoidal bar.

Hab. Costa Rica, Juan Vinas (*Schaus*), 1 ♀. *Exp.* 24 millim.

65*a*. **Nola transecta.** (Plate XXIII. fig. 29.)

Nola transecta, Hmpsn. A. M. N. H. (7) viii. p. 178 (1901).

White with a yellowish tinge; palpi black; head and tegulæ strongly irrorated with black. Fore wing with the costal and apical areas strongly suffused with red-brown and irrorated with black, the black irroration running obliquely across lower edge of apical area to middle of termen; traces of an antemedial line angled below the cell; the postmedial line represented by black points on veins 6, 7; traces of a sinuous grey subterminal line on the dark area; cilia red-brown. Hind wing fuscous brown, much darker in one female; a discoidal point, distinct on underside.

Hab. S. Leone (*W. G. Clements*), 4 ♂, 2 ♀ type. *Exp.* 18 millim.

66*a*. **Nola mesographa.** (Plate XXIII. fig. 30.)

Nola mesographa, Schaus, Pr. U.S. Nat. Mus. xxix. p. 195 (1905).

Head and thorax white; palpi at sides and antennæ tinged with brown; legs fuscous, the tarsi ringed with white; abdomen white tinged with fuscous except at base. Fore wing white; a triangular black and brown patch on base of costa; a medial patch with tufts of blue-black scales on it, extending to middle of cell and with slightly sinuous brown and black band from it to inner margin; postmedial line more or less reduced to points, excurved from costa to vein 4, then incurved and sinuous, the costa beyond it fuscous with white points; a subterminal diffused fuscous line, excurved at vein 7 and middle; the terminal area suffused with rufous. Hind wing white tinged with brown especially on terminal area; the underside with the costal and terminal areas irrorated with brown, a black discoidal spot.

Hab. Fr. Guiana, St. Jean Maroni (*Schaus*), 1 ♀, type † ♂ in Coll. Schaus; Brazil, Rio Janeiro. *Exp.* 18–24 millim.

*70*a*. **Nola triplaga.** (Plate XXIII. fig. 31.)

Nola triplaga, Dogn. Hét. Nouv. Am. Sud, vii. p. 10 (1914).

♂. Head and thorax pure white; palpi dark brown except at tips; antennæ brown except basal joint; patagia with black bars

near tips; pectus and legs whitish and red-brown, the fore tibiæ in front and tarsi black ringed with white; abdomen ochreous suffused with brown. Fore wing pure white; a triangular black and red-brown subbasal patch on costa and a similar quadrate medial patch with tufts of black and silvery scales at middle and upper angle of cell; a faint curved postmedial line with black points on it from costa to vein 2; the terminal area suffused with red-brown except at costa, with a black subterminal patch on costa and indistinct diffused blackish subterminal line, excurved below vein 7 and at middle; some dark terminal points. Hind wing white, the terminal area and cilia suffused with brown; a slight dark discoidal spot.

Hab. Panama, Lino (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 14 millim.

No. 71. del. *Lyclene distributa*, the species will stand as **Nola major**, Hmpsn.

Larva. Piepers, Tijd. v. Ent. xlvii. p. 139, pl. x. f. 1.

Thick; yellowish brown mixed with black; clothed with white and grey hairs, long at sides; each somite with two dorsal black warts and a yellow lateral wart. Food-plants: *Terminalia catappa* and *Lagerstræmia reginæ*.

72 *a*. **Nola biconica**. (Plate XXIII. fig. 32.)

Nola biconica, Hmpsn. A. M. N. H. (7) xix. p. 228 (1907).

Head and thorax grey-white irrorated with fuscous; tarsi fuscous ringed with white; abdomen grey tinged with fuscous. Fore wing white irrorated with brown; a brown fascia on base of costa; antemedial line arising from a small triangular brown patch on costa, blackish, oblique below submedian fold and not reaching inner margin; the tufts of scales at middle and end of cell brown, the latter placed at extremity of a small triangular costal patch, and with an oblique waved line from it to inner margin; postmedial line more or less punctiform angled outwards below costa, incurved to vein 6 and below it; subterminal line strongly angled outwards at vein 7 and excurved at middle; some fuscous on termen. Hind wing whitish tinged with fuscous; the underside white irrorated with brown, a black discoidal spot.

Hab. Panama, Cana Mines (*Tylecote*), 2 ♂; Br. Guiana, St. Jean Maroni (*Schaus*), 1 ♂; Brazil, Tijuca (*Wagner*), 1 ♀ type, São Paulo (*Jones*), 1 ♀, Aracatuba. *Exp.* 12–16 millim.

*72 *b*. **Nola sperata**. (Plate XXIII. fig. 33.)

Nola sperata, Schaus, A. M. N. H. (8) ix. p. 36 (1912).

♀. Head and thorax white with some black-brown scales; palpi black-brown except at tips; antennæ brown; legs brown and

white, the tarsi brown ringed with white; abdomen brown mixed with white. Fore wing white irrorated with brown and black scales; subbasal black points below costa and cell; a triangular blackish brown patch on costa near base; an antemedial series of small black spots, oblique below the cell; a tuft of brown scales in middle of cell and a tuft at upper angle at apex of a triangular brown patch on costa; two small obliquely placed black spots below end of cell; a postmedial series of small black spots, excurved to vein 4, then oblique; a subterminal series of conjoined black-brown spots, oblique towards costa, incurved at discal fold and excurved at middle; a maculate black-brown band just before termen, oblique across apical area; cilia black-brown mixed with white. Hind wing white tinged with brown, the veins and termen browner; an indistinct discoidal spot; cilia whitish at base, brownish at tips; the underside white, the costal half irrorated with black-brown, a large black discoidal spot.

Hab. Costa Rica, Juan Vinas (*Schaus*), type † ♀ in U.S. Nat. Mus. *Exp.* 16 millim.

73 *a*. **Nola artata.** (Plate XXIII. fig. 34.)

Nola artata, Schaus, A. M. N. H. (8) ix. p. 37 (1912).

♀. Head and thorax grey-white; pectus, legs, and abdomen grey suffused with brown. Fore wing silvery grey tinged with brown and irrorated with black; small brown patches on costa near base and at end of cell; antemedial line represented by some black scales; postmedial line represented by black scales, excurved to vein 4, then oblique; subterminal line faint, dark, excurved below vein 7 and at middle. Hind wing brown.

Hab. Costa Rica, Juan Vinas (*Schaus*), 1 ♀. *Exp.* 16 millim.

74 *a*. **Nola biumbrata.** (Plate XXIII. fig. 35.)

Nola biumbrata, Schaus, A. M. N. H. (8) ix. p. 37 (1912).

♀. Head, thorax, and abdomen grey mixed with brown; palpi blackish at sides. Fore wing grey suffused with reddish brown and irrorated with blackish; a slight dark spot on costa near base; antemedial line dark, rather diffused, oblique to discal fold, then inwardly oblique, connected with a dark spot in cell with an oblique mark beyond it from costa; an oblique diffused dark postmedial band. Hind wing whitish tinged with brown; the underside with the costal area suffused with brown, an oblique dark discoidal striga.

Hab. Costa Rica, Juan Vinas (*Schaus*), 1 ♀. *Exp.* 24 millim.

74 *b*. **Nola argyrolepis.** (Plate XXIII. fig. 36.)

Nola argyrolepis, Hmpsn. A. M. N. H. (7) xix. p. 228 (1907).

♀. Head and thorax ochreous white mixed with rufous scales; abdomen ochreous white tinged with rufous. Fore wing ochreous

thickly irrorated with rufous and with a few black and silvery scales; subbasal line rufous with a black point at costa, sinuous, from costa to submedian fold; antemedial line slight, irregularly waved, with black point at costa; medial line rather diffused, angled outwards at discal and submedian folds, a small black spot beyond it at upper angle of cell; postmedial line angled outwards below costa and inwards at vein 6, excurved to vein 3, then oblique and irregularly waved, with black point on it above vein 1; subterminal line indistinct, rufous, angled outwards at vein 7, excurved at middle, and ending at tornus; a terminal series of slight black points. Hind wing ochreous white tinged with rufous.

Hab. Mashonaland (*Dobbie*), 1 ♀ type. *Exp.* 22 millim.

74 *c*. **Nola bicincta.** (Plate XXIV. fig. 1.)

Nola bicincta, Hmpsn. A. M. N. H. (7) xv. p. 432 (1905).

♂. Head and thorax white; palpi yellow-brown; pectus, legs, and abdomen fuscous. Fore wing white; the costa with irregular yellow-brown and fuscous fascia; an oblique yellow and black antemedial band with a tuft of black scales on its outer edge in cell; a postmedial nearly erect yellow and black band, expanding to costa and with its outer edge indented above vein 2; some fuscous on termen towards apex. Hind wing pale fuscous.

Hab. Cape Colony, Deelfontein (*Col. Sloggett*), 1 ♂ type. *Exp.* 18 millim.

75 *a*. **Nola brachystria.**

Nola brachystria, Hmpsn. J. Bomb. Nat. Hist. Soc. xvi. p. 435, pl. D. f. 16 (1905).

♂. Head and thorax grey mixed with brown; palpi blackish at sides; tarsi banded with black; abdomen brownish grey. Fore wing grey irrorated with fuscous; very obscure brownish patches at base and middle of costa; an indistinct oblique brown antemedial line from cell to inner margin; an oblique medial line with black point on it below costa and a short black streak on median nervure between it and the antemedial line; a postmedial series of black points, the point on vein 6 displaced inwards, incurved below vein 4 and bent outwards at vein 1; the terminal area rather browner with a grey subterminal line excurved above and below middle; a terminal series of black points. Hind wing whitish tinged with brown especially towards termen.

♀. Without the black streak on median nervure of fore wing.

Hab. Bombay, N. Kanara, Karwar (*T. R. Bell*), 2 ♂, 2 ♀ type; Ceylon, Haldamulla (*Mackwood*), 1 ♂, Wattegama (*Mackwood*), 1 ♀. *Exp.* 16 millim.

75 *b*. **Nola poliotis**. (Plate XXIV. fig 2.)

Nola poliotis, Hmpsn. A. M. N. H. (7) xix. p. 228 (1907).

♀. Head and thorax whitish mixed with fuscous, the head whiter; abdomen white suffused with grey. Fore wing grey-white irrorated with fuscous; an indistinct dark antemedial line, very oblique from discal fold to inner margin; tufts of dark scales in upper part of cell towards extremity and at upper angle; an indistinct oblique dentate postmedial line with blackish points on the veins, somewhat excurved at middle and incurved in submedian interspace; a faint dentate subterminal line, angled outwards at vein 7 and excurved at middle; a terminal series of minute dark points. Hind wing white faintly tinged with brown; the underside with the costal area slightly irrorated with brown.

Hab. Transvaal (*Cholmley*), 3 ♀ type. *Exp.* 26 millim.

75 *c*. **Nola achromia**. (Plate XXIV. fig. 3.)

Nola achromia, Hmpsn. A. M. N. H. (8) iv. p. 352 (1909).

♂. Head and thorax white slightly tinged with yellowish; abdomen white. Fore wing white faintly tinged with rufous and irrorated with a few black scales; traces of a postmedial rufous line from vein 6 to middle of inner margin with series of blackish points on it, very oblique below vein 5; traces of a rufous subterminal line, excurved below vein 7 and at middle; a terminal series of minute black points. Hind wing pure white; the underside with slight discoidal lunule.

Hab. Queensland, Kuranda (*Dodd*), 1 ♂ type. *Exp.* 16 millim.

76. **Nola apera**, insert (syn.):—

Nola lagunculariæ, Dyar, Proc. Ent. Soc. Wash. iv. p. 465 (1901).

76 *a*. **Nola diplozona**, n. sp. (Plate XXIV. fig. 4.)

♂. Head, tegulæ, and prothorax white; palpi, lower part of frons, and antennæ blackish; thorax and legs blackish mixed with white; abdomen blackish with narrow whitish segmental bands. Fore wing white suffused and thickly irrorated with black; an indistinct inwardly oblique blackish antemedial line faintly defined on each side by whitish; an inwardly oblique straight blackish postmedial line defined on each side by white bands; a whitish subterminal line, excurved below costa; a terminal series of blackish points; a fine whitish line at base of cilia. Hind wing white

faintly tinged with brown; the underside with the costal area irrorated with blackish, a blackish discoidal spot.

Hab. Br. E. Africa, Nairobi (*Anderson*), 1 ♂ type. *Exp.* 16 millim.

76 *b*. **Nola leucalea.** (Plate XXIV. fig. 5.)

Nola leucalea, Hmpsn. A M. N. H. (7) xix. p. 229 (1907).

Head and thorax white, sometimes tinged with pale brown; palpi brownish at sides; abdomen white tinged with brown. Fore wing white irrorated with brown and sometimes tinged with pale brown; antemedial line fine, dark, excurved below costa and incurved at median nervure; medial line oblique towards costa, then slightly sinuous; tufts of dark scales in cell before the antemedial line, in middle and at upper angle; postmedial line slightly incurved from costa to vein 4, then oblique and slightly sinuous; subterminal line oblique towards costa and excurved at middle; a terminal series of black points. Hind wing white tinged with brown.

Hab. Br. E. Africa (*Corydon*), 1 ♂; Transvaal, White R. (*Cooke*), 2 ♀, Piet Retief (*Crawshaw*), 1 ♀ type, Reitfontein (*Janse*), 1 ♂, 2 ♀, Gemsbockfontein (*Janse*), 1 ♂, Bultfontein (*Janse*), 1 ♀. *Exp.* 20–22 millim.

76 *c*. **Nola cretacea**, n. sp. (Plate XXIV. fig. 6.)

♀. Head, thorax, and abdomen white faintly tinged with ochreous brown. Fore wing white faintly tinged with ochreous brown and sparsely irrorated with black; slight antemedial and medial tufts of dark scales in upper part of cell; postmedial line formed by diffused dark scales, excurved below costa and beyond lower angle of cell, incurved at discal fold and below vein 4; subterminal line rather diffused, brownish, excurved below costa and at middle, incurved at discal and submedian folds. Hind wing white.

Hab. N. Nigeria, Zungeru (*Macfie*), 1 ♀ type. *Exp.* 14 millim.

80 *a*. **Nola promelæna**, n. sp. (Plate XXIV. fig. 7.)

♂. Head white tinged with red-brown, the antennæ blackish towards base; thorax red-brown mixed with whitish, the tips of tegulæ and prothorax black; tarsi black ringed with white; abdomen whitish suffused with red-brown. Fore wing whitish suffused with red-brown, the costal area irrorated with black; antemedial and two medial dark marks on costa and in cell; postmedial dark points on veins 6 to 3; subterminal line rather diffused, very oblique and blackish from costa long before apex to

vein 6 on which it is bent inwards, then indistinct, brown and excurved at middle, some dark points beyond it on costa and a slight brown terminal line. Hind wing whitish tinged with red-brown.

Hab. Formosa, Kanshirei (*Wileman*), 1 ♂ type. *Exp.* 20 millim.

85 *a*. **Nola pulchella.** (Plate XXIV. fig. 8.)

Acontia pulchella, Leech, P. Z. S. 1889, p. 524, pl. 53. f. 10.

♀. Creamy white; palpi, frons, and fore legs black, the last with white rings on tarsi; abdomen with slight fuscous bands. Fore wing with oblique sinuous silvery and blackish bar from costa before the traces of the highly waved antemedial black line; an oblique black bar with large tuft of silvery scales on it from costa before the postmedial line, which is very strongly bent outwards below costa, sinuous to vein 4, then strongly incurved and with patches of silvery scales beyond it; the terminal area brown with trisinuate white subterminal line with prominent black patches in the sinuations; cilia blackish and grey. Hind wing with the terminal area tinged with brown, broadly at apex and narrowing to tornus.

Hab. Japan (*Pryer*), 1 ♀ type. *Exp.* 20 millim.

*85 *b*. **Nola zaplethes.** (Plate XXIV. fig. 9.)

Nola zaplethes, Turner, ined.

♀. Grey-white; palpi upturned, brown; tegulæ brown; abdomen tinged with brown towards extremity. Fore wing with the tufts of scales very large and erect; the costal area tinged with brown; antemedial and medial indistinct lines angled outwards below costa, then oblique and waved; the postmedial line indistinct, bent outwards below costa, obliquely excurved to vein 3, then strongly retracted and again excurved; the subterminal line blackish, prominent, obliquely curved from costa beyond middle to near termen at vein 2 where it is angled inwards, on vein 1 slightly angled outwards. Hind wing brownish white with slight discoidal spot on underside.

Hab. Queensland, Townsville, type † ♀ in Coll. Turner. *Exp.* 28 millim.

*87 *a*. **Nola lechriopa.** (Plate XXIV. fig. 10.)

Nola lechriopa, Turner, ined.

♂. Grey tinged with brown; palpi fuscous at sides; mesothorax banded with fuscous; abdomen brownish white, the anal tuft tinged with ochreous. Fore wing with the costal edge brown towards base;

the antemedial line excurved below costa, angled inwards above vein 1 and outwards below it; the tuft in cell brown and confluent with the antemedial line; the postmedial line arising from middle of costa, very strongly angled outwards below costa, minutely dentate to vein 3, then very strongly incurved, bent outwards again to inner margin and with some brown on its inner side on inner area and some spots beyond it on costa; an irregular diffused obliquely waved subterminal line slightly excurved at middle; a terminal series of dark points. Hind wing brownish grey with a fine pale line at base of cilia.

Hab. Queensland, Stradbrook I., type † ♂ in Coll. Turner. *Exp.* 18 millim.

*87 *b*. **Nola phlœophila.** (Plate XXIV. fig. 11.)

Nola phlœophila, Turner, ined.

♀. Grey-white; head and thorax strongly irrorated with brown and black; palpi blackish at sides; abdomen brownish. Fore wing strongly irrorated with black and tinged in places with brown; the costal edge brown towards base; a blackish mark below base of costa; the antemedial line angled outwards in the cell to the tuft of scales, angled inwards below the cell, then excurved; the postmedial line strongly bent outwards below costa, then indistinct, oblique and dentate with a series of black points beyond it; a subterminal series of short black streaks ending in white dashes; a series of short black streaks on the extremities of the veins. Hind wing pale brownish with slight fuscous discoidal spot.

Hab. Queensland, Brisbane, type † ♀ in Coll. Turner. *Exp.* 24 millim.

89 *a*. **Nola albescens.** (Plate XXIV. fig. 12.)

Nola albescens, Beth.-Baker, Nov. Zool. xv. p. 192 (1908).

♂. Head and thorax white faintly tinged with brown; palpi with black mark at base of 2nd joint; antennæ blackish; tarsi black ringed with white; abdomen white tinged with brown. Fore wing white slightly irrorated with brown; subbasal and antemedial black points on costa; the antemedial line indistinct, slightly waved, oblique from costa to median nervure, then erect and excurved below vein 1; two medial black spots on costa and an indistinct sinuous line from lower angle of cell to inner margin, with blackish mark at vein 2; postmedial line indistinct, with black point at costa and black spot on its inner side at vein 2, bent outwards below costa, excurved to vein 2, then incurved, three black points beyond it on costa; an indistinct curved subterminal series of small dark spots; a terminal series of slight dark striæ defined by white on inner side; cilia with faint brownish spots at base and slight line at middle. Hind wing white; the underside

with the costal area irrorated with brown, a brownish discoidal lunule and curved diffused postmedial line from costa to vein 2.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), 1 ♂ ; Br. N. Guinea, Owgarra (*Meek*), 1 ♂. *Exp.* 28 millim. Type † in Coll. Bethune-Baker.

90 *a*. **Nola diagona.** (Plate XXIV. fig. 13.)

Nola diagona, Hmpsn. A. M. N. H. (8) viii. p. 399 (1911).

♀. Head and thorax white slightly irrorated with brown; palpi with brown spot on 2nd joint in front; pectus and legs suffused with brown, the tarsi ringed with white; abdomen ochreous white, the ventral surface suffused with brown. Fore wing white irrorated with fuscous especially on outer half of medial area; a small subbasal dark spot on costa; antemedial line blackish with small spot on costa, oblique and sinuous to submedian fold, then inwardly oblique; a dark spot on costa above end of cell and oblique sinuous line from lower angle to inner margin; postmedial line blackish, oblique to vein 5, then inwardly oblique and slightly bent outwards to inner margin; subterminal line indistinct, dark, angled outwards below vein 7, excurved and with dark patch before it at middle, then oblique; a slight maculate line before termen, bent inwards to costa and a terminal series of dark striæ. Hind wing white, the termen tinged with brown except towards tornus; the underside with the costal area irrorated with brown and a discoidal striga.

Hab. Dutch N. Guinea, Fak-fak (*Pratt*), 1 ♀ type. *Exp.* 22 millim.

90 *b*. **Nola obliqua.** (Plate XXIV. fig. 14.)

Nola obliqua, Beth.-Baker, Nov. Zool. xv. p. 192 (1908).

♂. Head white, the palpi and antennæ tinged with brown; thorax white tinged with brown, the metathorax with two pairs of black spots; tarsi banded with black; abdomen white indistinctly banded with brown. Fore wing grey-white irrorated with brown especially on basal half; antemedial line black, oblique from costa to middle of cell, then inwardly oblique and slightly angled inwards on median nervure to vein 1; tufts of dark scales in middle of cell and on discocellulars; postmedial line formed by a double series of small black spots, very oblique from costa to vein 5 then very obliquely incurved and with oblique dark fascia from its angle to middle of termen; a subterminal series of small black spots, very oblique from costa to vein 6 where it is angled outwards, then erect; a series of black spots on apical part of costa and termen; cilia with a series of black spots at base. Hind wing greyish white; the underside with discoidal point and fine terminal line.

Hab. Br. N. Guinea, Owgarra (*Meek*), 1 ♂. *Exp.* 22 millim. Type † in Coll. Bethune-Baker.

*94 *a*. **Nola belotypa**. (Plate XXIV. fig. 15.)

Nola belotypa, Turner, ined.

♀. Head and thorax grey pencilled with brown; palpi blackish at sides; tibiæ and tarsi brown, the latter with grey rings; abdomen whitish. Fore wing reddish brown suffused with grey on costal and inner areas; a black streak from base of costa along subcostal nervure to the tuft at upper angle of cell; the antemedial line strongly angled outwards to the tuft at middle of cell and terminating at median nervure; the postmedial line very oblique, dentate and with some grey on its outer edge; traces of a sinuous subterminal line; cilia grey irrorated with black. Hind wing white tinged with brown especially towards termen.

Hab. Queensland, Brisbane, type † ♀ in Coll. Turner. *Exp.* 24 millim.

96 *a*. **Nola eugrapha**, n. sp. (Plate XXIV. fig. 16.)

♂. Head and thorax white mixed with red-brown; tegulæ black at base; fore tibiæ and tarsi banded with black; abdomen white tinged with rufous. Fore wing white irrorated with red-brown, the cell and submedian interspace on medial area suffused with rufous extending to beyond the postmedial line in the latter; slight brown subbasal marks on costa and median nervure; antemedial line black, oblique and sinuous to submedian fold and angled inwards at vein 1, a black streak beyond it in submedian fold to the postmedial line; tufts of raised scales in the cell towards extremity and on discocellulars; postmedial line black, bent outwards below costa, oblique to vein 4, then incurved and angled outwards at vein 1; subterminal line brown, oblique to vein 6, then formed by somewhat dentate marks to vein 3 and erect to inner margin; a fine blackish terminal line with white striæ before it. Hind wing pure white.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), 1 ♂ type. *Exp.* 28 millim.

99 *a*. **Pœcilonola chionobasis**. (Plate XXIV. fig. 17.)

Pœcilonola chionobasis, Hmpsn. A. M. N. H. (7) viii. p. 178 (1901).

♂. Palpi and frons black; vertex of head and thorax pure white, the antennæ towards tips and a patch on metathorax fuscous; pectus, legs and abdomen tinged with fuscous, tarsi ringed with white. Fore wing pure white; a large triangular black patch on middle of costa with a few silvery scales on it, its apex extending to median nervure, its outer edge strongly indented; the terminal area fuscous black, its inner edge waved and angled inwards to cell at vein 3; an irregular subterminal series of black marks. Hind wing with the basal half white, the terminal half fuscous.

Hab. Punjab, Kangra Valley, 4500′ (*Dudgeon*), 1 ♂ type. *Exp.* 14 millim.

100*a*. **Pœcilonola ochritincta.** (Plate XXIV. fig. 18.)

Pœcilonola ochritincta, Hmpsn. A. M. N. H. (7) viii. p. 178 (1901).

♂. Head, thorax, and abdomen white; palpi, antennæ, and legs fuscous. Fore wing with the basal area white tinged with ochreous, its outer edge oblique from costa before middle to tornus; short dark streaks on and below vein 1 just beyond middle; the apical half greyish fuscous with a diffused whitish patch extending from apex to discocellulars; some minute white specks on apical half of costa; an obscure irregularly trisinuate subterminal whitish line with some rufous on its inner side and a tuft of black scales below vein 3. Hind wing white tinged with fuscous.

Hab. Ceylon, Haputale (*Mackwood*), 1 ♂ type, Matale (*Pole*), 1 ♂. *Exp.* 16 millim.

Under **RŒSELIA**, insert:—

	Type.
Acatapaustus, Beth.-Baker, Nov. Zool. xi. p. 415 (1904)	*basifusca*.

105. Rœselia fola.

Larva, de Nicéville, Indian Museum Notes, v. p. 109, pl. x. f. 1; Piepers, Tijd. v. Ent. xlvii. p. 139.

Clothed with long fluffy white hair thicker and longer anteriorly and posteriorly; head dark brown; the cast skins of heads of earlier stages carried one above each other on the matted hairs of 1st somite; anterior pair of prolegs absent, one young larva with four head-skins pale ochreous. Food-plant, Almond.

Cocoon irregularly triangular, formed of fragments of the brown veins of the leaves mixed with silk on the underside of a leaf and capped by a bunch of white fluff.

Piepers describes the larva in Java as covered with grey hair.

106. Rœselia lignifera, insert (syn.):—

Chionæma lignaria, Roths. Nov. Zool. xx. p. 192 (1913).

Br. N. Guinea, Mambare R., Biagi (*Meek*), type † in Coll. Rothschild.

Larva. Piepers, Tijd. v. Ent. xlvii. p. 140, pl. x. f. 2.

106*a*. Rœselia intermedia.

Nola intermedia, Druce, Biol. Centr.-Am., Het. i. p. 140 (1885).

Fore wing with veiu 7 from 8 beyond 10; male with a groove in end of cell on underside.

♂. Head and thorax white; palpi black at base; antennæ brownish; abdomen white tinged with brown. Fore wing white

slightly tinged with brown; a subbasal black patch on costa irrorated with silvery scales; the tufts in middle and end of cell black with a quadrate black patch above them on costa; the postmedial line excurved between veins 6 and 3, then strongly incurved, with black and silvery irroration on its inner side below costa and between cell and inner margin; an irregularly sinuous subterminal line with

Fig. 58.—*Rœselia intermedia*, ♂ ½.

black patch on its inner side at costa; the termen rufous. Hind wing white with the apical area and termen suffused with fuscous; underside with the costal area irrorated with brown; a discoidal spot.

Hab. Costa Rica, Irazu (*Rogers*), 2 ♂ type, Godman-Salvin Coll. *Exp.* 22 millim.

*106*b*. Rœselia pernitens.

Rœselia pernitens, Schaus, A. M. N. H. (8) vii. p. 355 (1911).

Fore wing of male with elongate depressed fovea in end of cell on underside.

♂. Head and thorax silvery white; palpi at sides and antennæ red-brown; pectus and legs suffused with brown, the tarsi fuscous ringed with white; abdomen white tinged with rufous. Fore wing

Fig. 59.—*Rœselia pernitens*, ♂. ½.

silvery white; antemedial and medial blackish triangular patches on costa with some silvery scales on them; some dark points on postmedial part of costa and an obscure subterminal line, angled outwards below apex then sinuous, the area beyond it suffused with brown except at apex with some silvery scales on it; cilia brown with a fine pale line at base. Hind wing white, the apical area and

cilia tinged with brown. Underside of fore wing suffused with fuscous except the inner area; hind wing with the costal area irrorated with black, a slight discoidal spot.

Hab. Costa Rica, Guapiles (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 16 millim.

*106 *c*. Rœselia placens. (Plate XXIV. fig. 19.)

Rœselia placens, Schaus, A. M. N. H. (8) vii. p. 355 (1911).

♂. Head white, the palpi, a bar across frons and antennæ red-brown; thorax grey-white mixed with some red-brown; pectus white; legs and abdomen suffused with red-brown. Fore wing silvery white; the costal area to discal fold suffused with red-brown and irrorated with blackish to end of cell; a large tuft of rufous scales in and below the cell towards its extremity and a triangular mark on costa above end of cell; a diffused oblique leaden grey postmedial line; a leaden grey subterminal band, oblique from costa to vein 6 and excurved at middle, the area beyond it suffused with rufous with some grey points on costa. Hind wing brown the underside whitish, the costal area slightly irrorated with black, a fuscous discoidal spot and diffused postmedial line.

Hab. Costa Rica, Tuis (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 18 millim.

*106 *d*. Rœselia leucogramma.

Rœselia leucogramma, Dogn. Mém. Soc. Ent. Belg. xix. p. 124 (1912).

Fore wing of female with elongate depressed groove below vein 11.

♀. Head and thorax pale reddish ochreous mixed with fuscous, the vertex of head white; pectus, legs, and abdomen white suffused with ochreous, the tarsi tinged with fuscous and ringed with white.

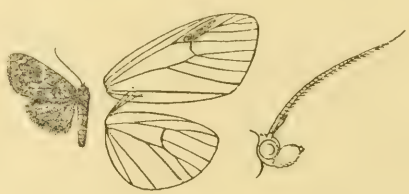

Fig. 60. *Rœselia leucogramma*, ♀. ½.

Fore wing white suffused with reddish ochreous and slightly irrorated with black except on terminal area; antemedial line diffused, black defined on inner side by white, slightly angled outwards below costa, bent outwards at median nervure, then oblique a tuft of ochreous and black scales beyond it in the cell; a faint

diffused medial line, oblique to lower angle of cell, then inwardly oblique and slightly sinuous, a tuft of scales beyond it at upper angle of cell; postmedial line diffused, black defined on outer side by white, excurved to vein 3, then bent inwards, some small white spots beyond it on costa; subterminal line diffused, black defined on outer side by white, excurved below vein 7 and at middle; a terminal series of minute white spots, bent inwards obliquely at apex. Hind wing white tinged with brownish ochreous especially on terminal area; the underside with the costal area irrorated with brown, a brown discoidal spot and terminal line.

Hab. Fr. Guiana, Maroni, type † ♀ in Coll. Dognin. *Exp.* 24 millim.

107 *a*. **Rœselia polyodonta.** (Plate XXIV. fig. 20.)

Rœselia polyodonta, Schaus, Pr. U.S. Nat. Mus. xxix. p. 195 (1905).

Head and thorax white; palpi tinged with blackish, the antennæ with rufous; tegulæ edged with blackish; thorax with fine subdorsal black lines; tarsi black ringed with white; abdomen white tinged with brown, ventrally irrorated with black. Fore wing white irrorated with rufous; a double black antemedial line bent inwards to costa and inner margin and erect between subcostal nervure and vein 1; a black point on middle of costa; discoidal lunule edged with blackish, a very highly dentate black line arising from its upper edge with long teeth running to cell at veins 3, 2 and on vein 1 to near antemedial line; postmedial line double, the outer line indistinct, strongly excurved from costa to vein 3, then incurved; subterminal line angled outwards almost to termen at veins 6, 4, 1; a fine terminal line; cilia chequered black and white. Hind wing white tinged with brown especially on terminal area; the underside with the costal area irrorated with brown, a discoidal point and curved postmedial line showing through to upperside.

Hab. Mexico, Vera Cruz, Atoyac (*Schumann*), 1 ♀, Godman-Salvin Coll.; Fr. Guiana, St. Jean Maroni (*Schaus*), 1 ♂, type † ♂ in U.S. Nat. Mus. *Exp.* ♂ 20, ♀ 22 millim.

114. **Rœselia micans**, insert (syn.):—

Afrida fasciata, Roths. Nov. Zool. xx. p. 195 (1913).

Colombia, Monte Tolima (*Fassl*), type † ♂ in Coll. Rothschild.

*114 *a*. **Rœselia unilinea.** (Plate XXIV. fig. 21.)

Rœselia unilinea, Schaus, A. M. N. H. (8) vii. p. 356 (1911).

♂. Head and thorax silvery white; palpi brown except at tips; antennæ brownish; pectus and legs suffused with brown; abdomen white suffused with brown. Fore wing silvery white; a subbasal

black spot with some silvery scales on it at costa; a narrow postmedial black-brown band, oblique to submedian fold, then inwardly oblique; some dark points on apical part of costa; a faint subterminal line oblique across apical area, then parallel to the termen, the area beyond it tinged with brown. Hind wing white, the apical area tinged with brown; the underside with the costal area tinged and irrorated with brown, a slight discoidal spot.

Hab. Costa Rica, Carillo (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 16 millim.

115 *a*. Rœselia xanthoplaga. (Plate XXIV. fig. 22.)

Rœselia xanthoplaga, Hmpsn. A. M. N. H. (8) viii. p. 399 (1911).

♀. Head and tegulæ white, the thorax white tinged with ochreous; palpi, antennæ, pectus, legs, and abdomen white tinged with brown, the tarsi fuscous ringed with white. Fore wing white suffused with pale red-brown, some yellow suffusion on basal area, the inner medial area yellow tinged with rufous and irrorated with large black scales and with slight black streaks on vein 2 and in submedian fold; antemedial line rather ill-defined, double, brownish filled in with white, excurved, a blackish spot on it at costa and an oblique blackish bar beyond it from costa with an oblique whitish shade from before it to lower angle of cell; postmedial line absent; the apical part of costa suffused with blackish with some white points on costa; subterminal line indistinct, white, obliquely excurved below costa; excurved to termen at middle, a white patch at tornus with an elliptical red-brown patch on it and a dark line on its inner edge; cilia white mixed with brown on apical half and with some dark points above tornus. Hind wing white, the apex faintly tinged with brown. Underside of fore wing white suffused with fuscous brown except on inner area.

Hab. Sikhim (*Möller*), 1 ♀ type. *Exp.* 26 millim.

116. Rœselia metallopa.

Larva. Agric. Gaz. N. S. W. xi. p. 647 (1901).

White to pale yellow, darker when mature, the dorsal surface grey; dorsal and lateral lines black, hairs black; head with long tuft formed by the cast skins of head placed one above the other; each somite with two lateral tubercles with long grey hairs, the dorsal tubercles grey with grey hairs shorter than the lateral ones. Food-plant, *Eucalyptus ficifolia*.

Pupa in a tent-like cocoon.

*116 *a*. Rœselia eceicei.

Acatapaustus ekeikei, Beth.-Baker, Nov. Zool. xi. p. 416, pl. vi. f. 20 (1904).

♀. Head, thorax, and abdomen grey-white slightly irrorated with

fuscous; tegulæ and shoulders with diffused black band. Fore wing grey irrorated with black and tinged with fuscous brown especially on terminal area; the basal half of costal area dark; antemedial line indistinct, waved, closely approximated to the prominent oblique black medial line which is diffused on inner side; postmedial line very indistinct, minutely dentate; subterminal line hardly traceable, somewhat excurved below costa and at middle. Hind wing brownish white. Underside of fore wing and costal half of hind wing suffused with fuscous brown.

Hab. Br. N. Guinea, Ekeikei, 1500′ (*Pratt*), type † ♀ in Coll. Bethune-Baker. *Exp.* 30 millim.

118 *a*. **Rœselia mesotherma**, n. sp. (Plate XXIV. fig. 23.)

♂. Head, thorax, and abdomen white; antennæ brownish; pectus and legs tinged with brown. Fore wing white, the basal costal area and terminal area at middle irrorated with brown, the medial area suffused with ochreous brown and slightly irrorated with dark brown except at inner margin; an indistinct curved diffused ochreous brown antemedial line; an ochreous brown patch at middle of costa defined on each side, by white, the costa beyond it ochreous brown with white points to the subterminal line; postmedial line only defined by the contrast between the medial and postmedial areas, evenly curved; subterminal line white defined on inner side by ochreous brown suffusion, excurved and slightly waved below vein 7 and at middle and excurved above inner margin. Hind wing white irrorated with ochreous brown. Underside of fore wing suffused and irrorated with brown; hind wing with the costal and terminal areas irrorated with ochreous brown, and with slight discoidal point.

Hab. C. China, Chungking (*W. R. Brown*), 1 ♂ type. *Exp.* 16 millim.

*122 *a*. **Rœselia niveicosta.** (Plate XXIV. fig. 24.)

Rœselia niveicosta, Schaus, Pr. U.S. Nat. Mus. xxix. p. 195 (1905).

♂. Head and thorax white irrorated with rufous; palpi with some fuscous at sides; abdomen ochreous white. Fore wing white thickly irrorated with rufous leaving the costal area whiter except the base of costal edge, the irroration below costal area darker; faint traces of a pale antemedial line towards inner margin; postmedial line indistinct, pale, slightly excurved from costa to vein 3, then slightly incurved; the subterminal line similar. Hind wing white with a slight yellowish tinge. Underside of fore wing with the costal half brown, the inner half whitish; hind wing with the costal area irrorated with brown.

Hab. Brazil, Castro Paraña (*D. Jones*), type † ♂ in U.S. Nat. Mus. *Exp.* 22 millim.

122 *b*. Rœselia versicolora. (Plate XXIV. fig. 25.)

Rœselia versicolora, Dogn. Ann. Soc. Ent. Belg. li. p. 225 (1907).

♂. Head and thorax white; palpi black except at tips; antennæ tinged with brown; patagia edged with brown; pectus and hind legs whitish mixed with brown; fore and mid legs black with the tarsi ringed with white; abdomen white tinged with brown, the dorsal crests black. Fore wing white suffused with grey and red-brown and irrorated with black; a black patch on basal costal area, extending on costa to the curved black antemedial line, slightly excurved below costa; the medial area with some black suffusion in submedian interspace and a rather triangular patch on costa; a small tuft of blackish scales in middle of cell and two on disco-cellulars with a diffused whitish lunule beyond them; postmedial line whitish defined by black on inner side, strongly beyond the cell, bent outwards below costa, excurved to vein 4, then strongly incurved to below end of cell, some small white spots beyond it on costa with black marks between them; subterminal line white defined on inner side by blackish forming small somewhat wedge-shaped marks, angled inwards below costa and in discal and submedian folds and excurved at vein 7, middle and above tornus; a terminal series of slight whitish striæ; cilia chequered whitish and fuscous at base, whitish tinged with brown at tips. Hind wing white with traces of slight discoidal spot and curved postmedial line; a slight brownish terminal line; the underside with the costal area irrorated with dark brown, a black-brown discoidal spot and diffused curved postmedial line from costa to submedian fold.

Ab. 1. Fore wing with the black on inner side of postmedial line beyond the cell forming somewhat wedge-shaped marks.

Ab. 2. Fore wing largely suffused with bright red-brown, the veins of postmedial area streaked with black.

Hab. S.E. Peru, Carabaya, Onconeque, 1 ♂. *Exp.* 24–28 millim. Type † in Coll. Dognin.

124 *a*. Rœselia hemizona. (Plate XXIV. fig. 26.)

Rœselia hemizona, Hmpsn. A. M. N. H. (8) viii. p. 400 (1911).

♂. Head and thorax ochreous white, the latter suffused with red-brown; palpi dark brown; antennæ red-brown; legs suffused with red-brown, the tarsi dark brown with pale rings; abdomen white slightly tinged with red-brown. Fore wing ochreous white, the costal area to beyond middle and the terminal area suffused with red-brown; an oblique red-brown bar from middle of costa to just below end of cell, defined at sides by white and with a few silvery scales on it; postmedial line very indistinct, oblique from the red-brown costal area to vein 4, then incurved; traces of a

punctiform subterminal line, angled inwards at vein 2; the veins of terminal area with slight dark streaks on apical half. Hind wing white, the termen and cilia faintly tinged with red-brown except towards tornus; the underside with the costal area faintly tinged with ochreous.

Hab. Dutch N. Guinea, Fak-fak (*Pratt*), 1 ♂ type; Oetakwa R., Snow Mts. (*Meek*), 2 ♂. *Exp.* 18–20 millim.

126 *a*. Rœselia infuscata. (Plate XXIV. fig. 27.)

Rœselia infuscata, Hmpsn. A. M. N. H. (7) xi. p. 342 (1903).

Head and thorax grey tinged with fuscous and irrorated with black; abdomen brownish white, the ventral surface irrorated with black. Fore wing grey tinged with fuscous and irrorated and suffused with black to the postmedial line; the tufts in cell blackish; the antemedial line hardly traceable on costal area, strongly angled outwards on median nervure and vein 1, and inwards in submedian fold; the postmedial line highly dentate, very oblique from costa to vein 4 where it is angled, then inwardly oblique and double; an indistinct irregular subterminal line, bent inwards to costa; a terminal series of black points. Hind wing white suffused with fuscous.

Hab. Mashonaland, Victoria Falls, 1 ♀, Umtali (*Marshall*), 1 ♂ type. *Exp.* 22 millim.

127 *a*. Rœselia irregularis. (Plate XXIV. fig. 28.)

Eugoa irregularis, Roths. Nov. Zool. xx. p. 226 (1913).

♀. Head and thorax white, the dorsum of thorax suffused with brown; palpi brown except towards tips; antennæ, pectus, legs, and abdomen brown. Fore wing white faintly tinged with brown; a slight subbasal black mark on costa with faint striga from its outer edge; a broad oblique fuscous brown medial band with sinuous edges; a somewhat diffused slightly dentate brown postmedial line, oblique to vein 4, then incurved and joining the medial band at submedian fold; a subterminal brown spot on costa with the subterminal line arising from it, oblique to vein 6, then sinuous and broad to vein 2; the terminal area brown, narrowing to apex and tornus. Hind wing pale brown. Underside uniform brown.

♂. Fore wing with the medial band more constricted in the cell, the postmedial line expanding into patches at costa and beyond lower angle of cell.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♂ in Coll. Rothschild; Snow Mts., Oetakwa R., (*Meek*), 1 ♀. *Exp.* 22 millim.

129 *a*. Rœselia pedanta. (Plate XXIV. fig. 29.)

Rœselia pedanta, Dyar, Pr. U.S. Nat. Mus. xlii. p. 94 (1912).

♀. Head and thorax white mixed with some fuscous brown; palpi fuscous except at tips; legs suffused with fuscous, the tarsi black ringed with white; abdomen grey suffused with fuscous brown leaving white segmental lines. Fore wing white slightly irrorated with fuscous; a subbasal black point on costa; antemedial line black, strongly curved; an oblique black striga from costa above end of cell and a line from vein 4 to inner margin, acutely angled inwards at veins 3 and 2, then oblique; postmedial line black, with some fuscous before it at costa, obliquely excurved from costa to vein 3, acutely angled inwards at vein 2, then oblique and approximated to the medial line, some small black spots beyond it on costa; subterminal line black, minutely waved, oblique towards costa, angled outwards at veins 7, 6, 4 and inwards at discal fold; some rufous before termen except towards apex; cilia white chequered with blackish. Hind wing white tinged with fuscous, the cilia paler at tips; the underside more strongly suffused and irrorated with fuscous, a faint discoidal spot.

Hab. Mexico, Misantla; Costa Rica, Juan Vinas (*Schaus*), 1♀. *Exp.* 30 millim.

*129 *b*. Rœselia recurvata. (Plate XXIV. fig. 30.)

Rœselia recurvata, Dogn. Hét. Nouv. Am. Sud, vii. p. 10 (1914).

♀. Head, thorax, and abdomen white suffused with brown; pectus, legs, and ventral surface of abdomen with a more ochreous tinge, the tarsi fuscous ringed with white. Fore wing whitish suffused with brown and thickly irrorated with black; a subbasal blackish patch on costa; antemedial line black defined on inner side by whitish, excurved below costa and incurved above vein 1; medial line blackish, obliquely excurved to vein 2 where there is a black patch between it and the postmedial line, then incurved; postmedial line black defined on outer side by whitish, very oblique to vein 7, then less oblique to vein 3, then strongly incurved to near the medial line; subterminal line blackish, obliquely excurved to vein 6, bent inwards at discal fold, then waved and bent inwards below vein 3, some small black spots beyond it on costa and slight black streaks on the extremities of the veins. Hind wing white, tinged with brown especially on terminal area; a faint discoidal spot and subterminal line.

Hab. Colombia, Cordoba, Monte Tolima, type † ♀ in Coll. Dognin. *Exp.* 30 millim.

*133 *a*. **Rœselia fuscimarginalis.** (Plate XXV. fig. 7.)

Nola fuscimarginalis, Wileman, Entom. xlvii. p. 161 (1914).

♂. Head and thorax white, the dorsum of thorax with red-brown mixed; antennæ with the branches red-brown; palpi, pectus, legs, and abdomen red-brown. Fore wing white slightly irrorated with red-brown, the terminal area suffused with red-brown except at costa; a subbasal red-brown patch on the costa; antemedial line very indistinct, brown, dentate, oblique to median nervure; a red-brown discoidal mark with some red-brown above it on the costa; postmedial line indistinct, red-brown, dentate, oblique to vein 6 and incurved below vein 5; a very indistinct dentate brown subterminal line, oblique towards costa; cilia deep red-brown. Hind wing whitish suffused with red-brown. Underside red-brown, the inner area of hind wing whitish.

Hab. Formosa, Garambi (*Wileman*), type † ♂ in Coll. Wileman. *Exp.* 22 millim.

135 *a*. **Rœselia melanosticta,** n. sp. (Plate XXIV. fig. 31.)

♂. Head, thorax, and abdomen white slightly tinged with brown; antennæ brown; palpi black, pure white towards tips; pectus, legs and ventral surface of abdomen pale brown, the fore legs black in front. Fore wing white irrorated with black; a small triangular subbasal black spot on costa with a slight streak beyond it in the cell; antemedial line black, excurved and waved, obsolete below vein 1, a black spot with some fuscous suffusion below it beyond it in the cell; a small black spot on middle of costa and three small spots on postmedial part of costa; a punctiform black postmedial line, arising below the costa, incurved beyond upper angle of cell, then excurved, and incurved below vein 4; a sinuous fuscous subterminal shade with series of black points on the veins, excurved below vein 7 and at middle, and incurved at discal and submedian folds; a fuscous shade just before termen and series of minute black streaks on the extremities of the veins; a fine black terminal line; cilia chequered black and white at base. Hind wing pure white; the underside with the costal area faintly irrorated with brown, a faint fuscous discoidal spot.

Hab. Br. E. Africa, Nairobi (*Anderson*), 1 ♂ type. *Exp.* 28 millim.

135 *b*. **Rœselia cretacea,** n. sp. (Plate XXIV. fig. 32.)

♀. Head and thorax chalky white irrorated with a few brown scales; antennæ fuscous; palpi black except towards tips; fore legs black; tarsi black ringed with white; abdomen white suffused

with brown. Fore wing chalky white sparsely irrorated with blackish; the costa with small black spots and points; antemedial line slight, blackish, oblique to a tuft of blackish scales in middle of cell, then inwardly oblique and ending at submedian fold; postmedial line black, oblique to vein 5 and incurved below vein 3; a maculate blackish subterminal line, oblique to vein 6 and angled inwards at veins 5 and 2: a terminal series of small blackish spots; cilia slightly tinged with brown. Hind wing white tinged with brown, especially on terminal half from costa to vein 2. Underside of fore wing fuscous; hind wing with the costal area suffused with fuscous.

Hab. Gold Coast, Bibianaha (*Spurrell*), 2 ♀ type, *Exp.* 26 millim.

137 *a*. **Rœselia divisoides.** (Plate XXIV. fig. 33.)

Rœselia divisoides, Schaus, Pr. U.S. Nat. Mus. xxix. p. 195 (1905).

Head and thorax white mixed with dark brown; palpi brown; tegulæ with blackish marks at tips; tarsi black ringed with white; abdomen white suffused with fuscous. Fore wing white irrorated with fuscous, the costal and terminal areas tinged with brown except at apex; a small subbasal black spot on costa; antemedial line black, oblique towards costa, then excurved in the interspaces and angled inwards on the veins; an indistinct medial line, oblique towards costa, then irregularly dentate; postmedial line black, strong and obliquely excurved from costa to vein 5, then inwardly oblique, slightly sinuous, and with black point on it at vein 2; subterminal line brown, oblique and punctiform towards costa, then minutely dentate; a series of minute black points on termen; cilia chequered white and brown. Hind wing whitish uniformly tinged with fuscous.

Hab. Fr. Guiana, St. Jean Maroni, type † ♂ in U.S. Nat. Mus.; Brazil, Tijuca (*Wagner*), 1 ♂, 1 ♀, Rio Janeiro, 2 ♂, Santos, Alto del Serra. *Exp.* ♂ 18, ♀ 22 millim.

140. **Rœselia patina** del. *Æmene plumatella.*

140 *a*. **Rœselia plumatella.**

Æmene plumatella, Druce, Biol. Centr.-Am., Het. i. p. 141, pl. 13. f. 20 (1885).

A distinct species, the female is similar to the male.

142 *a*. **Rœselia stictigramma.** (Plate XXIV. fig. 34.)

Rœselia stictigramma, Dogn. Mém. Soc. Ent. Belg. xix. p. 125 (1912).

♂. Head and thorax reddish ochreous mixed with some blackish, the vertex of head white; abdomen reddish ochreous with dorsal

series of black spots. Fore wing white suffused with reddish ochreous and slightly irrorated with black; a small blackish patch on costa near base; a curved antemedial series of black spots from costa to submedian fold, then a slight oblique double line to vein 1; an obscure blackish patch on costa above end of cell with a double series of small black spots excurved round end of cell from it to vein 2, then an oblique sinuous line; a double postmedial series of small black spots, excurved to vein 3, then oblique; a double subterminal series of small black spots, obliquely bent inwards to costa; a terminal series of small black spots and a series on the cilia. Hind wing white, the costal area tinged with ochreous; a postmedial series of blackish points on the veins from costa to vein 2; a dark terminal line; cilia tinged with brown; the underside irrorated with brown especially on costal area, a black discoidal bar, curved postmedial line with black points on the veins, and subterminal series of points from costa to vein 2.

Hab. Colombia, San Antonio (*Fassl*), type † ♂ in Coll. Dognin (*Palmer*), 1 ♂. *Exp.* 26 millim.

142 *b*. **Rœselia nepheloleuca,** n. sp. (Plate XXIV. fig. 35.)

♂. Head and thorax white mixed with red-brown; tarsi dark brown ringed with white; abdomen white tinged with brown. Fore wing white suffused with reddish brown leaving the submedian interspace, the end of cell, and the postmedial area except towards costa and inner margin pure white, a subbasal black point on costa; tufts of raised scales in the cell near base, at middle and at upper angle; antemedial line double, brown, excurved, slightly angled inwards at vein 1; an oblique black striga from costa at end of cell and slight points just beyond the cell; postmedial line white, defined on inner side by black points to vein 2, obliquely excurved to vein 5, then oblique and slightly waved; subterminal line white, defined on inner side by small somewhat dentate fuscous spots to vein 1 and by a fuscous spot on its outer side at costa, slightly waved, bent inwards to costa; a terminal series of white striæ; cilia white at tips with a fine dark line through them. Hind wing white, the termen pale brown; the underside with the costal area irrorated with red-brown, a brown discoidal spot.

Hab. Venezuela, Esteban Valley, Las Quignas, 1 ♂; Peru, Vilcanota (*Garlepp*), 1 ♂ type. *Exp.* 24 millim.

*142 *c*. **Rœselia pulverea.** (Plate XXIV. fig. 36.)

Rœselia pulverea, Dogn. Mém. Soc. Ent. Belg. xix. p. 124 (1912).

♀. Head and thorax white mixed with ochreous brown; pectus, legs, and abdomen white suffused with ochreous. Fore wing white tinged with ochreous brown and irrorated with black; a small black patch at base of costa and some blackish in cell near base; a faint

double antemedial line, oblique to median nervure, then inwardly oblique, a tuft of dark scales beyond it in the cell; a faint dark mark at middle of costa with two black points on the costa and two below it; postmedial line formed by minute dentate black marks, rather oblique to vein 5, then inwardly oblique, three small black spots beyond it on the costa; a faint diffused oblique dark subterminal line, slightly excurved at vein 7; a black terminal line; cilia chequered white and blackish at base. Hind wing white tinged with brown; a diffused blackish discoidal spot; a dark terminal line; the underside strongly suffused with brown, the discoidal spot large and prominent.

Hab. Colombia, Paramo del Quindin, type † ♀ in Coll. Dognin. *Exp.* 34 millim.

144. Rœselia incana.

♂. Fore wing with the antemedial line straighter with a dark reddish-brown band between it and the medial line except on inner area; the terminal area red-brown to within the subterminal line.

In Mus. Paris.

145 *a*. Rœselia decepta. (Plate XXV. fig. 1.)

Rœselia decepta, Schaus, A. M. N. H. (8) vii. p. 356 (1911).

Head, thorax, and abdomen white mixed with some brown; pectus, legs, and ventral surface of abdomen tinged with reddish brown. Fore wing white irrorated with dark brown; a brown subbasal spot on costa; traces of an antemedial dark line excurved below costa and incurved below the cell, a tuft of brownish scales beyond it in the cell; a triangular brown patch on costa at end of cell; a slight dark postmedial line, excurved below costa, then oblique; some brown points on apical part of costa; an indistinct brownish subterminal line, oblique towards costa and excurved at middle; the termen tinged with brown. Hind wing white with fine brown terminal line; the underside with the costal area irrorated with dark brown, a black discoidal spot.

Hab. Costa Rica, Guapiles (*Schaus*), type † ♂ in U.S. Nat. Mus., Carillo (*Schaus*), 1 ♀. *Exp.* ♂ 12, ♀ 18 millim.

*147 *a*. Rœselia aroa.

Cleolosia aroa, Beth.-Baker, Nov. Zool. xi. p. 424, pl. vi. f. 29 (1904).

♂. Head and thorax white; palpi except at tips, antennæ except at base, base of tegulæ and a patch on thorax black; legs mostly black, tibiæ and tarsi ringed with white; abdomen brownish white. Fore wing white sparsely irrorated with black and with some golden

scales especially in submedian interspace beyond the postmedial line; subbasal and medial triangular black patches on costa; antemedial line oblique from costa to submedian fold where it is connected by a black streak with the postmedial line, which is strongly excurved beyond the cell, then very oblique to submedian fold and angled outwards on vein 1; a slight black discoidal lunule and streaks on the veins beyond lower angle of cell; two black spots on costa at origin of subterminal line, which is angled outwards almost to termen at vein 7 and with blackish spots at veins 6, 5, 4, then indistinct and slightly angled inwards at veins 2 and 1; a series of slight streaks on extremities of the veins; cilia chequered black and white. Hind wing white with fine dark terminal line; the underside with the costal area irrorated with brown, an indistinct discoidal spot and curved postmedial line.

Hab. Br. N. Guiana. Dinawa, 4000′ (*Pratt*); type † ♂ in Coll. Bethune-Baker. *Exp.* 26 millim.

*149 *a*. Rœselia basifusca.

Acatapaustus basifusca, Beth.-Baker, Nov. Zool. xi. p. 415, pl. vi. f. 25 (1904).

♂. Head, thorax, and abdomen white tinged with brown; tegulæ and patagia at tips and basal crest of abdomen blackish. Fore wing white irrorated and in places suffused with brown; antemedial line indistinct, slightly excurved below the cell; medial line more prominent, slightly excurved below vein 2; postmedial line reduced to a series of slight dentate marks on the veins from costa to vein 3, oblique towards costa and below vein 4 bent inwards, entire and approximated to the medial line below vein 2; subterminal line represented by slight dentate black marks on the veins, oblique towards costa and somewhat incurved below vein 3; a fine terminal line. Hind wing white, the costal area and termen tinged with brown.

♀. Thorax with the dorsum suffused with purple; fore wing with the basal area to medial line suffused with rufous with a band of purple suffusion before the antemedial line, which and also the medial line are purple: some blue-grey before postmedial line; the whole terminal area below vein 5 suffused with rufous.

Hab. Br. N. Guinea, Dinawa, 4000′ (*Pratt*), type † ♂ ♀ in Coll. Bethune-Baker. *Exp.* 28 millim.

151 *a*. Rœselia atrinota.

Rœselia atrinota, Hmpsn. A. M. N. H. (8) viii. p. 400 (1911).

Hind wing with veins 3, 4 from cell.

♂. Head and thorax silvery white with a few blackish scales; palpi blackish; antennæ brown; the tegulæ with diffused blackish medial band; tibiæ and tarsi banded with brown; abdomen white

suffused with ochreous brown. Fore wing silvery white irrorated with a few black scales, the apical area blackish to vein 3 with some silvery scales on it and a whitish patch on costa at apex; some brown suffusion on costa near base with a white subbasal striga on it; medial line indistinct, double, blackish with some blackish suffusion on it at costa, oblique and slightly sinuous to submedian fold, then bent inwards to inner margin where there is a conical

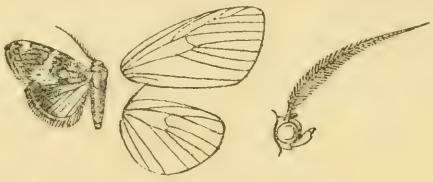

Fig. 61.—*Rœselia atrinota*, ♂ ½.

blackish patch on it; traces of an oblique black postmedial line before the dark apical area from costa to vein 4 and a black point in submedian fold, some whitish points beyond it on costa; traces of some black and whitish subterminal points on the dark apical area; a slight punctiform black terminal line; cilia blackish on apical half, whitish mixed with brown on inner half and with slight dark line through them. Hind wing white tinged with brown, the terminal area suffused with brown except towards tornus; cilia with a dark line through them; the underside with oblique dark discoidal striga.

Hab. Dutch N. Guinea, Fak-fak (*Pratt*), 1 ♂ type. *Exp.* 22 millim.

152. Rœselia anfracta

is a Noctuid=*Phobolosia reincarnata*, vol. ix. p. 527, over which it has precedence.

155 *a*. Rœselia negrita. (Plate XXV. fig. 2.)

Nola negrita, Hmpsn. Moths Ind. ii. p. 142 (1894).
Galleridia fuscizonea, Hmpsn. Moths Ind. iv. p. 499 (1896).

Head and thorax ochreous white tinged with reddish brown; thorax and abdomen grey white. Fore wing grey tinged with brown and slightly irrorated with fuscous; antemedial line oblique from costa to median nervure, angled inwards in submedian fold, then bent outwards to inner margin at medial line which is strong, curved, and brown-pink; a black discoidal bar; postmedial line nearly erect, excurved round discoidal bar and sometimes connected

with it at its upper and lower extremities, a similar very indistinct line beyond it; subterminal line indistinct, excurved at vein 7 and middle. Hind wing grey tinged with fuscous brown; a fine pale line at base of cilia; the underside with discoidal spot, curved postmedial line, and terminal band.

Hab. Madras, Bangalore (*Minchin*), type † ♂ in Coll. Joicey; Ceylon, Haputale (*Mackwood*), 1 ♂, Puttalam (*Pole*), 2 ♀ type *fuscizonea*. *Exp.* 14–16 millim.

155 *b*. Rœselia pallidiceps. (Plate XXV. fig. 3.)

Rœselia pallidiceps, Hmpsn. A. M. N. H. (7) xix. p. 229 (1907).

♂. Head and tegulæ ochreous white; palpi and lower part of frons black-brown; thorax grey mixed with fuscous; abdomen grey. Fore wing grey thickly irrorated with fuscous brown, the terminal half slightly paler; a dark slightly curved medial line; a black discoidal bar, the postmedial line conjoined to its upper and lower extremities and excurved beyond the cell, an ill-defined line from costa beyond it joining the subterminal line at vein 4 and with a dark striga from costa between them; the subterminal line ill-defined, slightly angled outwards at vein 7 and inwards at vein 2. Hind wing grey thickly irrorated with fuscous; cilia with a fine pale line at base.

Hab. Ceylon (*Alston*), 1 ♂ type, Madulsima (*Vaughan*), 1 ♂, Haputale (*Mackwood*), 1 ♂. *Exp.* 14 millim.

157 *a*. Zia hemiphæa. (Plate XXV. fig. 4.)

Zia hemiphæa, Hmpsn. A. M. N. H. (7) xv. p. 432 (1905).

♀. Head red-brown with the vertex white and a white bar across frons; tegulæ red-brown and grey, white at sides; thorax white; abdomen grey and white. Fore wing with the basal area white to one-third of costa and half of inner margin and with some grey striæ on costa; the terminal area silvery grey with some red-brown on medial part of costal and terminal areas and a white patch with some grey spots on it from apex to middle of postmedial line; the white area bounded by a rufous line slightly angled outwards in submedian fold; the postmedial line represented by some small dentate black marks between veins 7 and 2; subterminal line waved, white, interrupted, with some small patches of black scales before it at middle; a series of silvery striæ just before termen. Hind wing pale fuscous.

Hab. Java, Arjuno, 3000′ (*Doherty*), 1 ♀ type. *Exp.* 20 millim.

158 *a*. Zia ectrocta. (Plate XXV. fig. 5.)

Zia ectrocta, Hmpsn. A. M. N. H. (7) xix. p. 229 (1907); id. J. Bomb. Soc. Nat. Hist. xxi. pl. G. f. 7.

♂. Head and thorax white; legs blackish, the tarsi ringed with

white; abdomen white tinged with fuscous. Fore wing pure white; a small black spot on costa near base; a medial triangular black patch from costa to origin of vein 2, its outer edge excised in the cell; two small discoidal tufts of raised scales with a few dark scales round them; postmedial line black with small tufts of raised metallic scales on it, oblique and obsolescent from costa to vein 6, slightly incurved at discal fold and strongly below vein 4, the area beyond it rufous except at apex; subterminal line represented by a dark point on costa, then on the rufous area white defined on inner side by black from below apex to vein 3, excurved below vein 7 and at middle and below vein 2 angled inwards to near postmedial line; cilia rufous intersected with white. Hind wing white, the terminal area slightly tinged with brown from apex to vein 3.

Ab. 1. Fore wing with the postmedial line more angled inwards below vein 4 and with large black patches beyond it on inner area and at middle, the latter connected with the termen below apex by an oblique black fascia.

Hab. Ceylon, Haputale (*Mackwood*), 1 ♂ type, Maskeliya (*de Mowbray*), 1 ♂. *Exp.* 20–24 millim.

159 *a*. **Zia grisea**, n. sp. (Plate XXV. fig. 6.)

♀. Head and thorax grey-white mixed with brown; antennæ brown; tarsi brown ringed with white; abdomen white, dorsally suffused with brown. Fore wing pale grey irrorated with fuscous; a slight blackish streak on base of subcostal nervure; an indistinct waved blackish antemedial line; slight tufts of raised dark scales in middle of cell and on discocellulars; a blackish striga from middle of costa and faint waved line from lower angle of cell to inner margin; postmedial line blackish, bent outwards below costa, excurved and slightly dentate to vein 4, then retracted to below end of cell and angled outwards at vein 1; traces of a dark subterminal line, oblique towards costa, then sinuous. Hind wing whitish suffused with brown; the underside white, the costal and terminal areas irrorated with brown.

Hab. C. China, Hupeh, Lui-Shin-Tze (*Betton*), 1 ♀ type. *Exp.* 22 millim.

Genus **EURYNOLA**.

	Type.
Eurynola, Hmpsn. A. M. N. H. (7) xv. p. 432 (1905)	*mesoleuca*.

Proboscis fully developed; palpi obliquely upturned, rather thickly scaled; antennæ of male bipectinate, the apical third simple. Fore wing with veins 3 and 5 from near angle of cell; 6, 7 from cell; 8, 9, 10 stalked; 11 curved. Hind wing with veins 3, 4 stalked; 5 from just below middle of discocellulars; 6, 7 shortly stalked.

In key differs from *Melaleucia* in the fore wing having vein 10 stalked with 8, 9.

161 *a*. Eurynola mesoleuca.

Corula? mesoleuca, Lower, Trans. R. Soc. S. Austr. xxvii. p. 39 (1903).

♀. Head, thorax, and abdomen pale red-brown, the metathorax and base of abdomen grey. Fore wing rather pale red-brown with grey-white band from middle of costa expanding regularly to inner margin where it extends to tornus; an oblique, slightly waved antemedial dark line; an oblique line on inner edge of the white

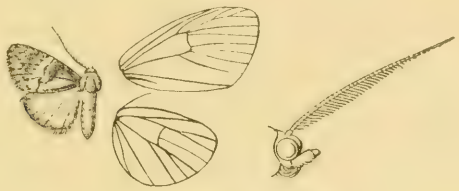

Fig. 62.—*Eurynola mesoleuca*, ♂. ½.

band slightly angled outwards at submedian fold; the postmedial line fine, brown, dentate from costa to vein 3, oblique to vein 4, then bent inwards to near medial line, then slightly excurved; a dentate subterminal line, oblique towards costa, angled outwards at vein 7 and excurved at middle, then incurved. Hind wing whitish, tinged with brown towards apex.

Hab. Queensland, Cooktown, 1 ♂, type † ♀ in Coll. Lower. *Exp.* 30 millim.

162. **Pexinola longirostris** is a Tineid, genus *Meridarchis*, Zell.

List of Unrecognised Species.

Celama sylpha, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 248 (1914). Panama.

Nola æschyntela, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 246 (1914). Panama.

„ *brunneifera*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 246 (1914). ♀ *N. æschyntela*, ♂ ..... Panama.

„ *chauna*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 246 (1914). Nr. *N. artata*, Schaus ..... Panama

„ *contorta*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 248 (1914). Panama.

„ *flavescens*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 248 (1914). Panama.

„ *habrophyes*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 248 (1914). Panama.

„ *nephelopasa*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 246 (1914) Nr. *N. artata*, Schaus ..... Panama

Nola nimbimargo, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 247 (1914).
Nr. *N. artata*, Schaus ..... Panama.
„ *prothyma*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 247 (1914). Panama.
„ *quintessa*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 247 (1914).
Nr. *N. apera*, Druce ..... Panama.
„ *vernalis*, Lower, Pr. Linn. Soc. N.S.W. xxv. p. 403 (1900). S. Australia.
„ *zeteci*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 247 (1914). Panama.
Rœselia atypica, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 246 (1914). Panama.
„ *hypopecta*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 245 (1914). Panama.
„ *melletes*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 245 (1914). Panama.
„ *micropecta*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 245 (1914). Panama.
„ *pecta*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 245 (1914). Panama.

Subfamily LITHOSIANÆ.

165. **Pelosia muscerda**, insert (syn.) :—

Ab. *concolor*, Schultz, Ent. Zeit. xxii. p. 184 (1909).

Fore wing without black points.

166 *a*. **Pelosia albicostata.** (Plate XXV. fig. 8.)

Pelosia albicostata, Hmpsn. A. M. N. H. (7) viii. p. 179 (1901).

♂. Grey-brown or fuscous brown; vertex of head, legs, extremity and ventral surface of abdomen ochreous white. Fore wing with narrow ochreous white costal fascia; cilia of both wings ochreous white.

Hab. Japan (*Pryer*), 2 ♂ type. *Exp.* 20–26 millim.

171 *a*. **Graphosia phæocraspis.**

Scoliacma hampsoni (♀), Beth.-Baker, Nov. Zool. xi. p. 417, pl. v. f. 20 (1904).
Graphosia phæocraspis, Beth.-Baker, Nov. Zool. xv. p. 193 (1908).
Tigrioides margaritacea, Roths. Nov. Zool. xix. p. 217 (1912).

♂. Antennæ bipectinate with rather long branches ending in a bristle; fore wing with the inner area very greatly dilated; vein 6 from below angle of cell; hind wing with veins 6, 7 from angle of cell.

Head and thorax yellowish white; fore legs tinged with fuscous; abdomen with the basal half white, the terminal half ochreous.

Fore wing yellowish white with the costal edges fuscous brown. Hind wing brownish, the costal area whitish, the inner area yellowish. Underside of both wings brown with the inner area whitish.

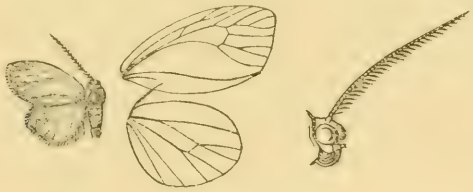

Fig. 63.—*Graphosia phæocraspis*, ♂. ½.

Hab. Dutch N. Guinea, Octakwa R., Snow Mts. (*Meek*), type † ♂ *margaritacea* in Coll. Rothschild; Br. N. Guinea, Dinawa, 4000′ (*Pratt*), type † ♂ in Coll. Bethune-Baker; Goodenough I. (*Meek*), 1 ♂. *Exp.* 24 millim.

*171 *b.* **Graphosia approximans.** (Plate XXV. fig. 9.)

Tigrioides approximans, Roths. Nov. Zool. xix. p. 217 (1912).

♂. Head and thorax yellowish white; palpi, frons, antennæ, and legs tinged with fuscous brown; abdomen whitish, yellowish towards extremity. Fore wing rather long and narrow; yellowish white, the costa, inner margin, and terminal area tinged with fuscous brown. Hind wing yellowish white, tinged with brown except the costal area, cell, and inner area. Underside of both wings suffused with brown, the inner areas broadly white.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

*171 *c.* **Graphosia lactea.** (Plate XXV. fig. 10.)

Tigrioides lactea, Roths. Nov. Zool. xix. p. 217 (1912).

♂. Head and thorax nearly pure white; abdomen white tinged with brownish towards extremity. Fore wing yellowish white, the costal edge and terminal area towards apex slightly tinged with brown. Hind wing yellowish white, terminal area faintly tinged with brown except towards tornus. Underside of both wings suffused with pale brown, the inner areas broadly white.

Hab. Dutch N. Guinea, Octakwa R., Snow Mts. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

*171 *d.* **Graphosia polylophota,** n. sp.

Abdomen of male with large lateral tufts of hair towards extremity, the claspers tufted with hair; fore wing with large costal

fold on underside, its lower edge somewhat angled and with tuft of hair above a large foveal depression below the cell with some upturned hair before it and a ridge tufted with hair beyond it; hind wing with the costa strongly lobed at middle, then truncate, fringes of long spatulate scales below basal part of costa and rough scales at the extremity of the lobe, the cell narrowed, the median nervure downcurved, vein 4 to apex and 6, 7 to the extremity of the costal lobe.

♂. Head and thorax pale ochreous, the tips of patagia and a patch on metathorax fuscous brown; pectus, legs, and abdomen

Fig. 64.—*Graphosia polylophota*, ♂. ½.

more orange-yellow, the last dorsally greyish towards base. Fore wing pale ochreous; an oblique diffused irregular black-brown band from origin of vein 2 to inner margin and a large black-brown patch beyond the cell; the terminal area irrorated with red-brown, with curved inner edge. Hind wing yellowish white; the underside with the long scales below costa more orange-yellow and the rough scales at the extremity of the costal lobe blackish.

Hab. Br. N. Guinea, Collingwood Bay, Haidana (*Meek*), type ♂ in Coll. Rothschild. *Exp.* 24 millim.

*171 *e*. Graphosia reticulata.

Graphosia reticulata, Roths. Nov. Zool. xix. p. 212 (1912).

Hind wing of male with vein 6 from near lower angle of cell and thence oblique to costa before apex, vein 4 to apex, 7 to costa well before apex.

Fig. 65.—*Graphosia reticulata*, ♂. ½.

♂. Head, thorax, and abdomen ochreous yellow, the back of head with fuscous point, the fore legs tinged with fuscous in front, the

abdomen greyish at base. Fore wing ochreous whitish; a narrow fuscous subbasal band from cell to inner margin, angled outwards on vein 1 and connected by streaks in cell and on vein 1 with the medial line, which is somewhat angled inwards on median nervure, then oblique and finer to inner margin, connected by streaks on the veins with the postmedial band, which is angled inwards and somewhat dilated beyond upper angle of cell and incurved below vein 4, where it is connected by a short fascia with the terminal band, the inner edge of which is dentate at the veins. Hind wing ochreous white.

♀. Fore wing with the inner half irrorated with brown, the subbasal band and medial line obsolete, the terminal band diffused on inner side.

Hab. Br. N. Guinea, Kumusi R. (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* 24 millim.

171*f*. **Graphosia pachygramma**, n. sp.

Hind wing of male with the costa lobed at middle with a tuft of hair curled over on underside, then truncate, vein 4 to apex, 6, 7 slight to the extremity of the costal lobe.

♂. Head, thorax, and abdomen ochreous yellow slightly tinged with brown. Fore wing ochreous whitish slightly irrorated with

Fig. 66.—*Graphosia pachygramma*, ♂. ½

brown; a fuscous postmedial band with a slight purplish tinge, angled outwards at vein 4 and inwards at submedian fold where it is connected with a dark mark below middle of cell; a diffused fuscous brown terminal band with a slight purplish tinge, connected with the postmedial band at vein 4 and inner margin.

Hab. Br. N. Guinea, Milne Bay (*Meek*), 2 ♂ type. *Exp.* 20 millim.

171. **Graphosia bilineata**, insert (syn.) :—

Mithuna quadrilineata, dilutior, Roths. Nov. Zool. xix. p. 219 (1912).

Dutch N. Guinea, Octakwa R., Snow Mts. (*Meek*), type † ♂ in Coll. Rothschild.

*171 *g*. **Graphosia quadrilineata.** (Plate XXV. fig. 11.)

Mithuna quadrilineata, Roths. Nov. Zool. xix. p. 219 (1912).

♂. Head and thorax pale orange-yellow, the back of head, tegulæ, patagia, and prothorax with small black spots; fore and mid tarsi blackish at extremities; abdomen yellow, greyish at base. Fore wing pale orange-yellow; subbasal line black, arising below the costa and angled outwards at vein 1 on which it is connected by a black streak with the postmedial line; antemedial line black, arising just below the costa, angled inwards just below median nervure, then oblique and sinuous; postmedial line black, arising below the costa, emitting short streaks inwards beyond upper angle of cell and on vein 2 and outwards between veins 4, 3, incurved below vein 4; the termen black at apex, then with short black streaks on the extremities of the veins. Hind wing very pale orange-yellow.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

*171 *h*. **Graphosia stenopepla.** (Plate XXV. fig. 12.)

Graphosia stenopepla, Turner, ined.

♀. Head, thorax, and abdomen ochreous white tinged with brown. Fore wing long and narrow; ochreous white irrorated with dark brown; an oblique dark brown postmedial line interrupted between veins 4 and 6 and emitting streaks on the veins on outer side. Hind wing whitish tinged with pale brown.

Hab. Queensland, Townsville, type † ♀ in Coll. Turner. *Exp.* 26 millim.

173. **Lambula laniafera**, insert (syns.):—

Lambula aroa, Beth.-Baker, Nov. Zool. xi. p. 416 (1904), ♂.
Lambula bilineata, Beth.-Baker, Nov. Zool. xi. p. 416 (1904), ♀.

Br. N. Guinea, Aroa R., type † ♂ *aroa* and type † ♀ *bilineata* in Coll. Rothschild.

*173 *a*. **Lambula castanea.** (Plate XXV. fig. 13.)

Lambula castanea, Roths. Nov. Zool. xix. p. 214 (1912).

♂. Head fulvous brown, the palpi except at base, and antennæ black-brown; thorax black-brown, fulvous brown behind; pectus, legs, and abdomen fulvous brown, the last with the medial segments dorsally black-brown. Fore wing fulvous yellow thickly irrorated with red-brown; the costa suffused with dark brown; a rather diffused inwardly oblique dark brown medial line; cilia dark brown at base. Hind wing fuscous brown, the base and cilia fulvous brown.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

*173 *b*. **Lambula thermopepla**, n. n.

Macaduma castanea, Roths. Nov. Zool. xix. p. 236 (1912), nec p. 214.

Fore wing of male with vein 2 from well before angle of cell; vein 3 from angle.

♂. Head and thorax bright red-brown; pectus, legs, and abdomen whitish tinged with rufous, the last with the lateral and anal tufts reddish ochreous. Fore wing bright red-brown, the basal area suffused with fuscous, extending on costa to middle and on inner margin to beyond middle; a waved blackish medial line

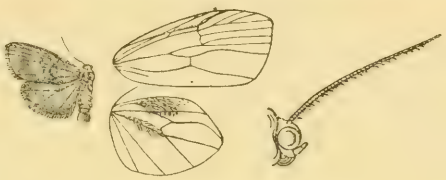

Fig. 67.—*Lambula thermopepla*, ♂. ½.

from cell to inner margin; the termen and cilia purplish brown. Hind wing greyish suffused with fuscous brown, the termen and cilia paler; the underside with the costal area reddish ochreous at base, then fuscous.

Hab. Queensland, Cairns (*Dodd*), type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

*174 *a*. **Lambula flavobrunnea.** (Plate XXV. fig. 14.)

Lambula flavobrunnea, Roths. Nov. Zool. xix. p. 214 (1912).

♂. Head, thorax, and abdomen fulvous yellow; palpi except at base, antennæ, and fore legs in front brown. Fore wing fulvous yellow, the costa and apical area suffused with brown; an obliquely curved maculate brown band from below costa beyond middle to lower angle of cell. Hind wing pale fulvous yellow.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♂ in Coll. Rothschild.

*175 *a*. **Lambula bifasciata.**

Crambidia bifasciata, Roths. Nov. Zool. xix. p. 219 (1912).

Hind wing of male with fold at base of costa on underside and no patch of androconia on upperside.

♂. Head and thorax fuscous brown; abdomen grey tinged with fuscous, the anal tuft ochreous brown. Fore wing brownish grey irrorated with dark brown; some dark brown at base; diffused

inwardly oblique dark brown medial and postmedial bands. Hind wing grey-brown. Underside of fore wing dark brown.

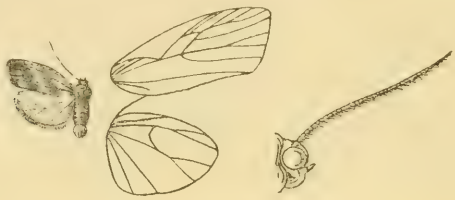

Fig. 68.—*Lambula bifasciata*, ♂. ½.

♀. Head and thorax whitish suffused with dark brown; fore wing paler with the medial band rather outwardly oblique, the postmedial band bent outwards at middle.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* 22 millim.

*178 *a*. **Lambula æthalocis**, n. n. (Plate XXV. fig. 15.)

Scoliacma fuliginosa, Roths. Nov. Zool. xix. p. 215 (1912), nec Wlk.

♂. Head and thorax fuscous brown tinged with grey; abdomen grey, the anal tuft and ventral surface ochreous brown. Fore wing grey-brown irrorated with fuscous brown, the costal area and termen suffused with fuscous brown; diffused oblique medial and subterminal fuscous brown lines. Hind wing pale grey-brown, the apical area rather darker; the underside with the costal half darker brown.

Hab. Br. N. Guinea, Angabunga R. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

182. **Lambula orbonella**, insert (syn.):—

Ilema cuprea, Roths. Nov. Zool. xix. p. 221 (1912).

Br. N. Guinea, Kumusi R. (*Meek*), type † ♀ in Coll. Rothschild.

182 *a*. **Lambula bivittata.**

Scoliacma bivittata, Roths. Nov. Zool. xix. p. 215 (1912).

Hind wing with veins 6, 7 stalked, 8 from middle of cell.

♂. Head and thorax dark reddish brown; abdomen rather greyer brown. Fore wing whitish thickly irrorated with red-brown; a diffused oblique medial red-brown band and a similar subterminal band excurved below the costa; cilia red-brown at base, whitish at tips. Hind wing whitish faintly tinged with red-brown.

♀. Head and thorax whitish suffused with red-brown; fore wing rather paler; hind wing whitish without red-brown tinge.

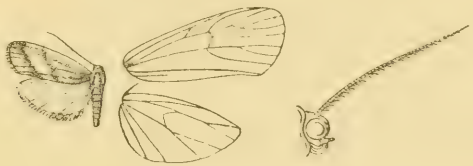

Fig. 69.—*Lambula birittata*, ♂. ½.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), 1 ♀, Mt. Goliath (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* 28 millim.

*182 *b*. **Lambula flavogrisea**. (Plate XXV. fig. 16.)

Poliosia flavogrisea, Roths. Nov. Zool. xix. p. 216 (1912).

♀. Head and thorax orange-yellow; antennæ brown; fore tibiæ and tarsi black, the latter with yellow rings on two basal joints; abdomen black-brown, the anal tuft orange-yellow at extremity, the ventral surface orange-yellow with black patch on basal half. Fore wing uniform orange-yellow, the cilia black at apex. Hind wing uniform black-brown. Underside of fore wing suffused with brown except basal, costal, and inner areas; hind wing with the basal half of costal area yellow.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 22 millim.

Genus **LAMBULODES**, nov.

Type, *L. sericea*.

Palpi porrect, slender, extending to just beyond the frons; antennæ ciliated; tibiæ with the spurs long; abdomen clothed with long hair, the anal and genital tufts large. Fore wing of male with a large costal fold on upperside from before middle to well beyond middle, the apex obliquely truncate; the cell less than half the length of wing; vein 2 from well before angle, curved at base; 3, 4 on a long stalk; 6, 7, 8 and 10 stalked, 9 absent, 11 from cell, free. Hind wing with the discocellulars strongly angled inwards; vein 2 from near angle of cell, 3, 4 on a long stalk; 6 typically in male from the stalk of veins 3, 4 near angle of cell, oblique to costa before apex; 7 to costa, in female 6, 7 stalked; 8 from the cell towards extremity; male with the costa strongly lobed at middle and fringed with rough hair, the apex typically obliquely truncate, a large triangular patch of brown androconia on underside beyond lower angle of cell, the inner area with a fold containing a fringe of long hair on underside.

In key differs from *Pelosia* in the fore wing having vein 10 stalked with 6, 7, 8 and vein 11 not anastomosing with 12.

*182 *c*. Lambulodes sericea.

Lambula sericea, Roths. Nov. Zool. xix. p. 212 (1912).

♂. Head and thorax ochreous whitish; abdomen ochreous, the base and ventral surface whitish. Fore wing ochreous whitish slightly irrorated with reddish brown, the discal area rather more ochreous; diffused golden brown antemedial patches from costa and from submedian fold to inner margin; the costal lobe tinged with golden brown; a broad golden brown subterminal band from

Fig. 70.—*Lambulodes sericea*, ♂. ½.

below vein 7 to inner margin. Hind wing ochreous whitish; the underside with the patch of androconia beyond lower angle of cell red-brown and the fringe of hair on inner area fulvous yellow.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♂ in Coll. Rothschild; Br. N. Guinea, Angabunga R. (*Meek*). *Exp.* 22 millim.

*182 *d*. Lambulodes sericeoides. (Plate XXV. fig. 17.)

Lambula sericeoides, Roths. Nov. Zool. xix. p. 212 (1912).

♂. Head and thorax golden brown, the latter with some ochreous whitish; pectus, legs, and abdomen brown mixed with some ochreous white, the last whitish at base and with the anal tuft fulvous yellow. Fore wing creamy white, the costal half of basal area and the costal fold golden brown; a rounded golden brown antemedial patch from cell to inner margin; some golden brown irroration on medial area in submedian interspace; a broad golden brown band from the extremity of costal fold to inner margin, its outer edge obliquely rounded towards costa and its inner edge slightly excurved at middle; the termen and base of cilia golden brown. Hind wing creamy white; the underside with the costa tinged with brown, the patch of androconia beyond lower angle of cell red-brown, the fringe of hair on inner area fulvous yellow.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim. This may be a variety or fresher specimen of *L. sericea*.

*182 *e*. Lambulodes bimaculata. (Plate XXV. fig. 18.)

Lambula bimaculata, Roths. Nov. Zool. xix. p. 213 (1912).

♂. Head and thorax golden brown, the latter with some whitish mixed; pectus, legs, and abdomen whitish suffused with rufous, the fore legs brownish in front. Fore wing creamy white; a subbasal golden-brown patch from below costa to above inner margin and an antemedial patch on inner area; the costal lobe suffused with golden brown; a golden brown medial patch in submedian interspace, its upper extremity giving off a curved spur on outer side; a broad subterminal golden brown band, its outer edge curved inwards to costa at the extremity of the costal fold and its inner edge incurved in submedian interspace; the termen narrowly golden brown. Hind wing creamy whitish; the underside with the costa tinged with red-brown, the patch of androconia beyond lower angle of cell deep red-brown, and the tuft of hair on inner area rufous.

♀. Abdomen greyish; fore wing whiter, the markings golden bronze, a subbasal patch from below costa to above inner margin, a broad antemedial band with its outer edge excurved at middle, a large round discal patch, and curved subterminal band; hind wing fuscous grey.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* 22 millim. This again may be a strongly marked form of *L. sericea*.

182 *f*. Lambulodes brunneomarginata.

Lambula brunneomarginata, Roths. Nov. Zool. xix. p. 212 (1912).

Hind wing of male with veins 6, 7 stalked, no patch of brown

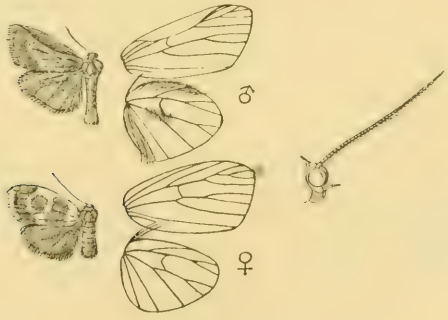

Fig. 71.—*Lambulodes brunneomarginata*, ♂, ♀. ½.

androconia beyond lower angle of cell but some short downturned hair in, below and beyond lower angle, the apex not truncate.

♂. Head and thorax fuscous brown with a slight silvery gloss; pectus, legs, and abdomen brown, the last with the anal tuft and ventral surface reddish ochreous. Fore wing creamy white, the base, costal area, and a subterminal band fuscous brown with a golden gloss, the band with its inner edge incurved at submedian fold; cilia fuscous brown. Hind wing ochreous whitish; the underside with the costal area tinged with fuscous brown, the fringe of hair on inner area fulvous.

♀. Abdomen with the anal tuft brownish ochreous, whitish below; fore wing pure white, a broad brown antemedial band with a golden cuprous gloss from below costa to inner margin, a large round discoidal patch, and a broad curved subterminal band; hind wing and underside of both wings fuscous.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♂, ♀ in Coll. Rothschild; Br. N. Guinea, Milne Bay (*Meek*); Goodenough I. (*Meek*), 2 ♀. *Exp.* 22 millim.

Genus **PSEUDOSCOLIA**, nov.

Type, *P. tenebrifera*.

Proboscis fully developed; palpi upturned, slender; antennæ of male with bristles and cilia; tibiæ with the spurs moderate; abdomen clothed with rough hair, with sublateral tufts of long hair at extremity, the claspers long and clothed with downturned hair. Fore wing with the apex rounded, the termen obliquely curved; the subcostal and median nervures approximated to origin of vein 2 which arises from middle of cell and is downcurved at base; 3 from angle of cell, downcurved at base; 5 absent; 6 from upper angle; 7, 8, 9 stalked, 7 from beyond 9; 10 from angle of cell; 11 becoming coincident with 12. Hind wing with the basal part of costa lobed and fringed with hair, the apical part truncate; vein 2 from well before angle of cell; 3, 4 coincident; 5 absent; the discocellulars very short; veins 6, 7 coincident; 8 from angle of cell.

In key differs from *Pseudilema* in the fore wing having vein 6 from the cell.

*182 *g.* **Pseudoscolia tenebrifera**, n. sp.

Scoliacma brunnescens, Roths. Nov. Zool. xix. p. 215 (1912), ♀ (nec ♂).

♂. Head and thorax yellowish tinged with red-brown; palpi

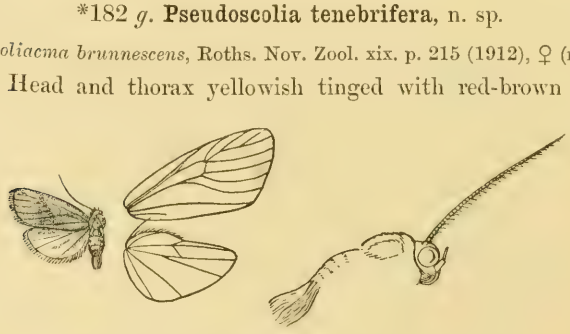

Fig. 72.—*Pseudoscolia tenebrifera*, ♂. ½.

fuscous; fore tibiæ and tarsi fuscous in front; abdomen whitish, the extremity and ventral surface pale yellow with a reddish tinge.

Fore wing yellowish suffused and irrorated with red-brown, the terminal area rather darker; an oblique postmedial series of short fuscous streaks on the veins. Hind wing yellowish white.

Hab. Br. N. Guinea, Angabunga R. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

Genus **PSEUDILEMA**.

Type.

Pseudilema, Beth.-Baker, Nov. Zool. xi. p. 418 (1914) ..... *ochracea*.

Palpi upturned, slender; proboscis fully developed; antennæ of male with bristles and cilia; tibiæ with the spurs moderate; abdomen with large protuberance on ventral surface near extremity. Fore wing of male with the costa lobed beyond middle; the inner area very strongly dilated and lobed; vein 1 connected by a bar with 2; the subcostal and median nervures approximated to near end of cell; 2 from well before angle, strongly curved at base; 3 from near angle of cell, curved at base; 5 absent, 6, 7, 8, 9 stalked, 7 from beyond 9; 10 from angle, curved upwards to the costal lobe; 11 becoming coincident with 12. Hind wing with the basal part of costa strongly lobed and fringed with long hair; a fold in cell forming a large pocket on underside, some rough hair at upper angle of cell; vein 2 from long before angle; 3, 4 coincident; 5 absent; 6, 7 coincident, short; 8 from middle of cell; female with the wings normal, fore wing with veins 3, 4 stalked.

In key differs from *Graphosia* in the palpi being upturned.

*182 *h*. **Pseudilema ochracea**.

Graphosia ochracea, Beth.-Baker, Nov. Zool. xi. p. 415, pl. v. f. 36 (1904), ♀.
Pseudilema dinawa, Beth.-Baker, Nov. Zool. xi. p. 419, pl. v. f. 18 (1904), ♂.

♂. Head and thorax brownish ochreous; abdomen grey tinged with fuscous, the anal tufts ochreous. Fore wing pale ochreous brown

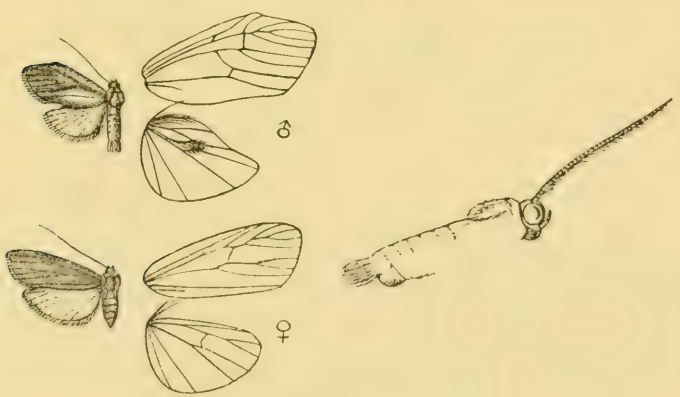

Fig. 73.—*Pseudilema ochracea*, ♂, ♀. ½.

with slight brown irroration. Hind wing pale yellow; the underside with the long hair at base of costa ochreous, the hair at middle of costa and upper angle of cell fuscous.

♀. Hind wing without the fulvous and fuscous hair.

Hab. Br .N. Guinea, Dinawa, 4000′ (*Pratt*), type † ♂ *dinawa*, Aroa R. (*Meek*), type † ♀ in Coll. Bethune-Baker. *Exp.* 26 millim.

Genus **STRIOSIA**, nov.

Type, *S. irrorata*.

Proboscis fully developed; palpi porrect, extending to just beyond the frons; frons smooth; antennæ of male with short branches ending in bristles; tibiæ with the spurs moderate. Fore wing very narrow, the apex rectangular, the termen evenly curved; the subcostal and median nervures approximated to towards end of cell, vein 2 from angle of cell, strongly curved at base; 3, 4 stalked; 5 absent, 6, 7, 8, 9 stalked, 7 from beyond 9; 10 from cell; 11 anastomosing with 12. Hind wing with the costa highly arched in male to beyond middle, the apical part oblique; vein 2 from towards angle of cell; 3, 4 stalked; 5 absent; 6, 7 stalked; 8 from middle of cell.

In key differs from *Garudinistis* in the fore wing having vein 6 stalked with 7, 8, 9.

*182 *i.* **Striosia irrorata.**

Calamidia irrorata, Roths. Nov. Zool. xix. p. 223 (1912).

Head and thorax pale yellow mixed with cupreous red-brown; tarsi red-brown ringed with pale yellow; abdomen whitish tinged with rufous towards extremity. Fore wing yellowish white thickly irrorated and striated with cupreous red-brown, on costal area

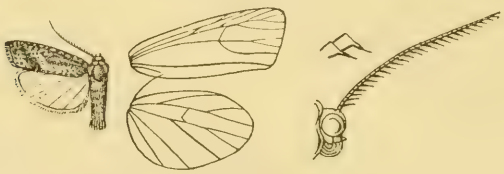

Fig. 74.—*Striosia irrorata*, ♂. ½.

forming rather quadrate reticulations; an oblique diffused red-brown postmedial band. Hind wing yellowish white, the terminal area tinged and irrorated with red-brown from costa to vein 2. Underside of fore wing suffused with red-brown, the costal and terminal areas striated with yellowish white; hind wing with the costal half suffused with pale red-brown with some yellowish white striation beyond the cell.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 26, ♀ 30 millim.

Genus **SCOLIOSIA**, nov.

Type, *S. brunnescens*.

Proboscis fully developed; palpi upturned, slender; frons smooth; antennæ of male with bristles and cilia; tibiæ with the spurs moderate; abdomen clothed with rough hair, the anal tuft and claspers large. Fore wing with the apex rounded, the termen obliquely curved, the costa of male with fold on medial area on upperside; vein 1 bent upwards at middle and connected with 2 by a bar; the subcostal and median nervures approximated to origin of vein 2 which arises well before end of cell and is curved towards base, then the median nervure curved upwards; veins 3, 4 from angle of cell; 5 absent; the discocellulars oblique; 6, 7, 8, 9 stalked, 10 from angle of cell; 11 anastomosing with 12; male with ridges of hair on subcostal and median nervures and a patch of black androconia in and below end of cell. Hind wing with the basal half of costa strongly lobed and fringed with black scales at extremity, the apical part truncate to vein 4, a patch of androconia in cell on upperside and fringe of hair below base of costa on underside; vein 2 from well before end of cell; 3, 4 coincident, 5 absent; 6, 7 shortly stalked, bent upwards to the extremity of the costal lobe 8 from middle of cell.

In key differs from *Pseudilema* in the fore wing having vein 11 anastomosing, and not becoming coincident, with 12.

*182 *j*. **Scoliosia brunnescens.**

Scoliacma brunnescens, Roths. Nov. Zool. xix. p. 215 (1912), ♂.

♂. Head and thorax red-brown; abdomen greyish, the anal tuft and ventral surface pale yellow. Fore wing uniform red-brown.

Fig. 75.—*Scoliosia brunnescens*, ♂. ½.

Hind wing yellowish white with a slight rufous tinge. Underside of fore wing with the patch of androconia at end of cell black.

Ab. 1. Head, thorax, and fore wing yellower and much less tinged with red-brown; hind wing yellowish white without rufous tinge.

Hab. Br. N. Guinea, Angabunga R. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

The genera **Tylanthes**, p. 123 and **Teratopora**, p. 271 are better placed as derived from **Scoliacma**.

238. **Tylanthes ptochias**, insert (syn.):—

Nishada louisiadensis, Roths. Nov. Zool. xx. p. 223 (1913).

Louisiades, Sud Est I. (*Meek*), type † ♂ in Coll. Rothschild.

Page 271. Genus **TERATOPORA.**

Fore wing with vein 5 absent; 6 from below middle of discocellulars in male; 7, 8, 9 stalked, 7 from beyond 9; 10 shortly stalked with 7, 8, 9 in male; 11 anastomosing with 12; a costal fold on underside. In the female vein 2 is from towards angle of cell, curved at base; 3, 4 stalked; 5 absent; 6 from below upper angle; 7, 8, 9 stalked, 10 from cell, 11 anastomosing with 12. In *T. haplodes* the hind wing has veins 3, 4 coincident in both sexes.

The genus should be placed near *Scoliacma*, from which it differs in the palpi being longer and oblique.

567 *a*. **Teratopora nephelozona**, Meyr., trans. from *Scoliacma*, no. 184.

♂. Fore wing with the costal area folded over on upperside and clothed with hair-like scales; the costal and median nervures curved upwards towards the costa for half length of cell with an elongate patch of androconia below the cell on underside; vein 2 from towards end of cell; 3, 4 from angle; 6 from just above lower angle; hind wing with the costa highly lobed and fringed with long hair-like scales, the apical area excised to vein 4, the lower angle of cell produced, vein 2 from angle; 6, 7 coincident, 8 strongly curved.

Solomon Is., Bougainville (*Meek*), 1 ♂, 1 ♀. *Exp.* ♂ 28 millim.

567 *b*. **Teratopora unifascia.** (Plate XXV. fig. 19.)

Ilema unifascia, Roths. Nov. Zool. xix. p. 222 (1912).

♀. Head, tegulæ, and base of patagia orange-yellow; antennæ brownish; thorax brown with a leaden grey gloss, the metathorax orange-yellow behind; pectus and legs orange-yellow, the fore and mid legs with the extremities of femora, the tibiæ and tarsi fuscous; abdomen grey-brown, the ventral surface orange-yellow. Fore wing pale brown with a leaden grey gloss, the base and costal edge orange-yellow; an oblique diffused fuscous postmedial band from below costa to inner margin; cilia orange-yellow at tips. Hind wing pale yellow.

Hab. Br. N. Guinea, Kumasi R. (*Meek*), 1 ♀. *Exp.* 32 millim. Type † ♀ in Coll. Rothschild.

No. 184. *Scoliacma* **nephelozona**, Meyr., belongs to the same section as *T. irregularis*, the hind wing with veins 3, 4 stalked in male, coincident in female.

*567 *c*. **Teratopora agramma**, n. sp.

Hind wing of female with veins 3, 4 stalked.

♂. Head and thorax pale grey-brown with a slight reddish tinge; pectus and legs ochreous, the fore tibiæ and tarsi brownish in front; abdomen ochreous, dorsally greyish towards base. Fore wing pale grey-brown with a slight reddish tinge. Hind wing

Fig. 76.—*Teratopora agramma*, ♂, ♀. ½.

ochreous white. Underside of fore wing with the area below the cell whitish; hind wing with the costal area faintly tinged with reddish.

♀. Hind wing brownish white; underside of fore wing uniform pale brown.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 34, ♀ 40 millim.

568. **Teratopora haplodes**, insert (syn.):—

Pseudilema dinawa, Beth.-Baker, Nov. Zool. xi. p. 419, pl. v. f. 17 (1904) (♀).

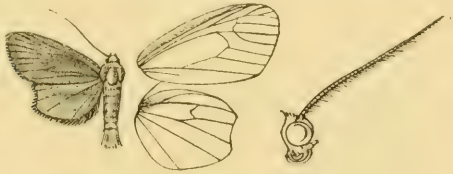

Fig. 77.—*Teratopora haplodes*, ♂ ½.

The type ♀ is a male.

*568 *a*. **Teratopora meteura**, n. sp.

Hind wing of male very broad, the costal area clothed on under-

side with rough downturned scales, veins 3, 4 from angle, vein 3 bent downwards and becoming coincident with 2, which arises from near base of cell, before termen; female with veins 3, 4 coincident.

♂. Head and thorax fuscous brown; pectus ochreous; legs pale grey-brown; abdomen with the basal half greyish, the terminal half pale rufous, the ventral surface ochreous. Fore wing

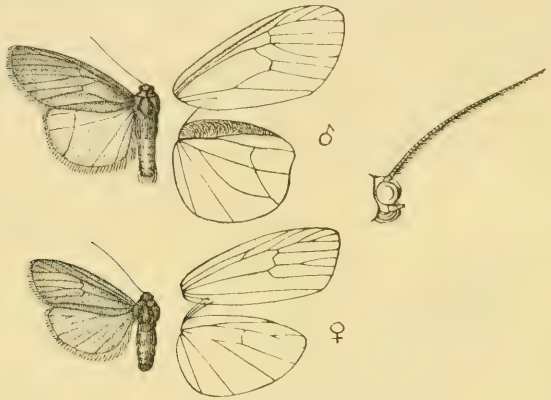

Fig. 78.—*Teratopora meteura*, ♂, ♀. ½.

fuscous brown. Hind wing ochreous white. Underside of fore wing whitish, the costal and apical areas greyish brown.

♀. Hind wing brownish white; underside of fore wing uniform greyish brown.

Hab. Br. N. Guinea, Angabunga R. (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 40, ♀ 36 millim.

*568 *b*. **Teratopora plicata**, n. sp.

Fore wing of male with very large costal fold on underside extending to beyond middle; hind wing broad with the costa distorted towards base, the cell very narrow; veins 3, 4 shortly

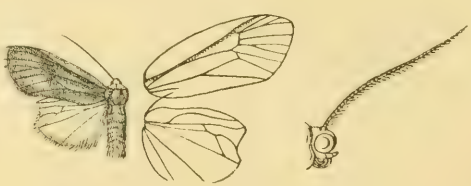

Fig. 79.—*Teratopora plicata*, ♂. ½.

stalked, 3 bent downwards and becoming coincident with 2, which arises from towards base of cell, before termen.

♂. Head and thorax orange-yellow, the antennæ, patagia except at base, and a large patch on dorsum of thorax grey-brown; fore

legs brownish in front; abdomen orange-yellow, dorsally greyish except towards extremity. Fore wing grey-brown, the base and costal area to beyond middle orange-yellow; a rather oblique dark shade just beyond the cell. Hind wing ochreous white. Underside of fore wing whitish, the costal and apical areas orange-yellow; hind wing pale yellow, the costal area more orange-yellow.

Hab. Br. N. Guinea, Kumusi R. (*Meek*), type ♂ in Coll. Rothschild. *Exp.* 32 millim.

Page 102. Under **SCOLIACMA** insert:—

	Type.
Blaviodes, Beth.-Baker, A. M. N. H. (8) vi. p. 441 (1910)	*ochracea*.

*183 *a*. Scoliacma ochracea.

Blaviodes ochracea, Beth.-Baker, A. M. N. H. (8) vi. p. 441 (1910).

Antennæ of male bipectinate with moderate branches ending in bristles; fore wing with vein 6 from well below angle of cell; hind wing with the costal half dilated, the costa folded over below,

Fig. 80.—*Scoliacma ochracea*, ♂. ½.

the cell with a fold in it and the upper part produced, the subcostal nervure sinuous and veins 6, 7 from angle and curving apart at base.

♂. Head and thorax fulvous yellow; antennæ brownish; tibiæ tinged with brown; abdomen brownish ochreous, the anal tuft and ventral surface fulvous yellow. Fore wing fulvous yellow, the terminal area faintly tinged with brown. Hind wing brown, the costal area whitish; the underside with the costal area and cell yellow.

Hab. Dutch N. Guinea, Arfak Mts. (*Pratt*), type † ♂ in Coll. Kenrick. *Exp.* 26 millim.

*184 *a*. Scoliacma hampsoni.

Scoliacma hampsoni, Beth.-Baker, Nov. Zool. xi. p. 417, pl. vi. f. 23 (1904), ♂.
Ilema nivea, Beth.-Baker, Nov. Zool. xi. p. 420, pl. vi. f. 21 (1904), ♀.
Tigrioides albescens, Roths. Nov. Zool. xix. p. 218 (1912).

Antennæ bipectinate with rather long branches ending in a

bristle; fore wing with the inner margin strongly lobed and fringed with hair; a fringe of hair below the cell on underside, the upper margin of cell downcurved, vein 11 arising from the same point as 10, retracted almost in an S-shape and becoming coincident with 12; hind wing very ample, the medial part of costa fringed with long hair, vein 8 very sinuous, 7 arising from before angle of cell and widely diverging from 6, the upper discocellular very oblique.

White; antennæ, thorax, anal tuft, and ventral surface of abdomen tinged with brown. Fore wing with the costal edge

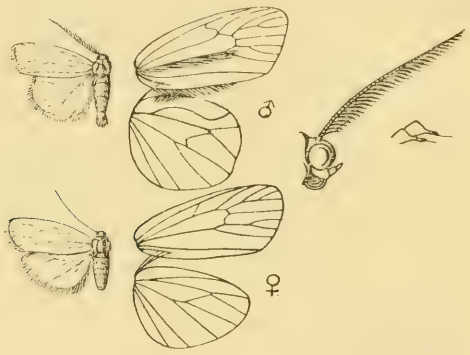

Fig. 81.—*Scoliacma hampsoni*, ♂, ♀. ½.

brownish, the lobe on inner margin tinged with brown. Underside of fore wing with the fringe of hair fulvous, the costal area and area beyond the cell suffused with brown; hind wing with the costal area tinged with brown.

♀. White; thorax tinged with ochreous; fore wing with the costal edge brown, the costal area on underside suffused with brown.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♂, ♀ *albescens* in Coll. Rothschild; Br. N. Guinea, Dinawa, 4000′ (*Pratt*), type † ♂ and type *nivea* ♀ in Coll. Bethune-Baker. *Exp.* 26 millim.

184 *b*. Scoliacma virginea.

Scoliacma virginea, Beth.-Baker, Nov. Zool. xv. p. 193 (1908).

Antennæ of male bipectinate, the branches dilated at extremity and ending in a bristle; fore wing with the tornal half of inner margin strongly excised, the subcostal nervure downcurved beyond middle and fringed with short downcurved hair with a fringe of long hair below it on median nervure on underside, the neuration distorted; hind wing with the costal area very ample, vein 8 curved

upwards at middle and the subcostal nervure downwards with a groove between them; veins 7, 6 strongly curved.

♂. Head and thorax silvery white; antennæ with the branches tinged with brown; fore femora towards extremity and tibiæ on inner side fuscous; abdomen white, the anal tuft tinged with ochreous. Fore wing silvery white, the inner margin tinged with

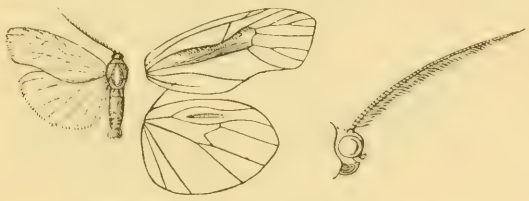

Fig. 82.—*Scoliacma virginea*, ♂. ½.

ochreous at middle. Hind wing white faintly tinged with ochreous rather more strongly on costal area. Underside of fore wing and costal area of hind wing tinged with fulvous.

♀. Wholly white.

Hab. Br. N. Guinea, Owgarra (*Meek*), 1 ♂, 2 ♀, Biagi. *Exp.* 36 millim. Type † in Coll. Bethune-Baker.

*184 *c*. Scoliacma albogrisea.

Tigrioides albogrisea, Roths. Nov. Zool. xix. p. 218 (1912).

Antennæ of male bipectinate with moderate branches ending in bristles; palpi oblique, the 3rd joint long and extending to above vertex of head; wings normal; hind wing with veins 6, 7 from angle of cell.

♂. Head and thorax pure white; palpi, antennæ, the fore legs and mid tibiæ and tarsi tinged with fuscous; abdomen white tinged

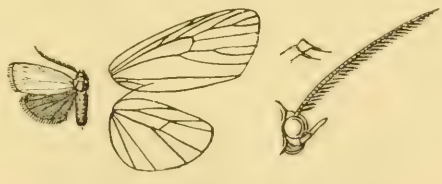

Fig. 83.—*Scoliacma albogrisea*, ♂. ½.

with fuscous brown. Fore wing almost pure white, the costal edge fuscous brown. Hind wing white suffused with fuscous brown. Underside of both wings fuscous brown, the inner area of fore wing except towards tornus and the base and basal half of inner area of hind wing white.

Hab. Dutch N. Guinea, Octakwa R., Snow Mts. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

*185 *a*. Scoliacma aroa.

Scoliacma aroa, Beth.-Baker, Nov. Zool. xi. p. 416 (1904).

Fore wing of male without costal fold; vein 1 slightly bent upwards at middle and connected by a bar with vein 2; hind wing with costal fold on basal half of costa below with some rough hair

Fig. 84.—*Scoliacma aroa*, ♂. ½.

below it, the apical part of costa excised, veins 6, 7 stalked, 8 from cell.

♂. Very pale yellowish. Fore wing with diffused brownish patch beyond the cell from costa to vein 3; the apical part of termen slightly tinged with brown. Hind wing rather paler.

Hab. Br. N. Guinea, Up. Aroa R. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

*185 *b*. Scoliacma apiciplaga. (Plate XXV. fig. 20.)

Melanæma apiciplaga, Roths. Nov. Zool. xx. p. 203 (1913).

♂. Head, thorax, and abdomen very pale yellow; antennæ brownish except towards base; fore and mid tibiæ brown in front. Fore wing pale yellow with a fuscous brown patch in and beyond end of cell extending from the costa to vein 3 and shading to paler brown at termen. Hind wing pale yellow. Underside of fore wing with the whole terminal area suffused with brown.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

187. Scoliacma brunnea, insert (syns.):—

Ilema hades, Beth.-Baker, Nov. Zool. xi. p. 420, pl. v. f. 14 (1904).
Nishada brunnea, Roths. Nov. Zool. xix. p. 216 (1912).

Fore wing of male with large costal fold on underside extending to well beyond middle, the area below the cell clothed with whitish androconia except towards termen; vein 1 giving off an obliquely curved spur from middle to middle of vein 2; 3, 4 from cell; 6 from below angle of discocellulars. Hind wing with the costal half clothed with whitish androconia on upperside; vein 2 from towards base of cell; veins 6, 7 coincident, the basal half of sub-

costal nervure curved downwards, sinuous and approximated to the median nervure.

♂. Metathorax and abdomen blacker brown; fore wing strongly

Fig. 85.—*Scoliacma brunnea*, ♂, ♀. ½.

suffused with purple; hind wing with the inner area slightly tinged with purple; underside of fore wing with the costal and terminal areas suffused with purple; hind wing tinged with purple.

Br. N. Guinea, Kumusi R. (*Meek*), type † ♂, ♀ *brunnea* in Coll. Rothschild; Br. N. Guinea, Dinawa, type † ♀ *hades* in Coll. Bethune-Baker.

187 *a*. **Scoliacma fuscofascia**. (Plate XXV. fig. 21.)

Nishada fuscofascia, Roths. Nov. Zool. xx. p. 223 (1913).

♀. Head and tegulæ orange-yellow, the latter with black bars at middle; antennæ brown; palpi reddish brown at tips; thorax red-brown with a pair of orange-yellow patches on prothorax and a patch on metathorax; pectus and legs orange-yellow, the tibiæ and tarsi suffused with brown; abdomen reddish brown, the ventral surface orange-yellow. Fore wing pale red-brown; some orange-yellow at base; a darker red-brown shade at end of cell from costa to inner margin and the termen rather darker red-brown. Hind wing white tinged with red-brown, the termen suffused with red-brown expanding irregularly below vein 2. Underside of fore wing whitish suffused with red-brown; hind wing with the costal area suffused with red-brown.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♀ in Coll. Rothschild, Oetakwa R., Snow Mts. (*Meek*), 1 ♀. *Exp.* 28 millim.

*188 *a*. **Scoliacma xuthopis**. (Plate XXV. fig. 22.)

Scoliacma xuthopis, Turner, ined.

♀. Pale fulvous brown. Fore wing with a short recurrent vein from vein 2 near its base, the upper angle of cell much produced;

irrorated with fuscous and with traces of an oblique fuscous post-medial line. Hind wing paler.

Hab. W. Australia, Albany, type † ♀ in Coll. Turner. *Exp.* 28 millim.

*188 *b*. **Scoliacma ligneofusca.** (Plate XXV. fig. 23.)

Ilema ligneofusca, Roths. Nov. Zool. xix. p. 222 (1912).

♀. Head and tegulæ ochreous yellow; antennæ brown; thorax brown; pectus and legs reddish brown; abdomen grey-brown, the ventral surface ochreous yellow. Fore wing uniform pale ochreous brown. Hind wing ochreous white, the costal area tinged with ochreous brown.

Hab. German N. Guinea, Astrolabe Bay (*Wahnes*), type † ♀ in Coll. Rothschild. *Exp.* 30 millim.

*188 *c*. **Scoliacma fuscescens.** (Plate XXV. fig. 24.)

Tigrioides fuscescens, Roths. Nov. Zool. xix. p. 218 (1912).

♀. Head and thorax pale yellow, the latter tinged with red-brown; abdomen yellowish suffused with brown. Fore wing pale yellow tinged with red-brown except on costal area towards base. Hind wing yellowish white.

Hab. Br. N. Guinea, Kumusi R. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 22 millim.

*189 *a*. **Lepista pulverea.**

Lepista pulverea, Turner, ined.

Fore wing with vein 6 strongly stalked with 7, 8, 9; 7 from beyond 9; 10, 11 sometimes from a point, 11 becoming coincident with 12; hind wing with the discocellulars absent.

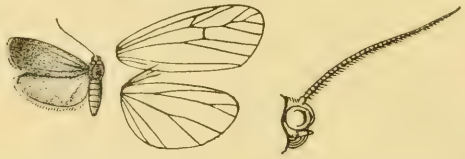

Fig. 86.—*Lepista pulverea*, ♀. ½.

♀. Ochreous; head, thorax, and abdomen tinged with brown. Fore wing strongly irrorated with brown.

Hab. Queensland, Brisbane, Stradbrook I., type † ♀ in Coll. Turner. *Exp.* 28 millim.

This species will require a genus when the male is discovered.

*190 *a*. **Lepista arabica.** (Plate XXV. fig. 25.)

Ilema arabica, Rebel, Denk, Math.-Nat. Akad. Wissen. Wien. lxxi. p. 52 (1907).

♂. Head orange-yellow; antennæ brownish; thorax grey with yellow patch on metathorax; pectus yellow, the legs grey; abdomen grey, the anal tuft yellowish. Fore wing pale grey, the costal edge narrowly yellow; cilia yellowish at base, white at tips. Hind wing yellowish white, the terminal area tinged with brown from apex to vein 2; cilia yellowish white. Underside of fore wing grey with the costal area yellow; hind wing whitish with the costal and terminal areas suffused with ochreous.

Hab. Arabia, Ras Farták, type † ♂ in Mus. Vienna. *Exp.* 34 millim.

*199 *a*. **Poliosia zatesima.** (Plate XXV. fig. 26.)

Poliosia zatesima, Turner, ined.

♂. Head, thorax, and abdomen grey; frons, fore and mid legs tinged with fuscous; abdomen tinged with brown towards extremity. Fore wing pale brownish grey. Hind wing yellowish grey.

Hab. Queensland, Kuranda, type † in Coll. Turner. *Exp.* 14 millim.

202 *a*. **Poliosia albida**, n. sp. (Plate XXV. fig. 27.)

♀. Head and thorax white; abdomen grey-white; pectus, legs, and ventral surface of abdomen tinged with rufous. Fore wing white with a silvery gloss. Hind wing ochreous white. Underside white with a slight rufous tinge.

Hab. Gambia, Bathurst (*Sir G. Carter*), 1 ♀ type. *Exp.* 18 millim.

*204 *a*. **Chrysoscota albomaculata.** (Plate XXV. fig. 28.)

Chrysoscota albomaculata, Roths. Nov. Zool. xix. p. 216 (1912).

Fore wing with vein 6 shortly stalked with 7, 8, 9.

♂. Head, thorax, and abdomen red-brown with a cupreous gloss; legs yellowish and brown; anal tuft at sides and ventral surface of abdomen yellowish suffused with brown. Fore wing red-brown with a cupreous gloss: a triangular creamy white patch in end of cell. Hind wing dark red-brown.

Hab. Br. N. Guinea, Mambare, R. Biagi (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

204 *b*. **Chrysoscota lacteiplaga.** (Plate XXV. fig. 29.)

Chrysoscota lacteiplaga, Roths. Nov. Zool. xix. p. 216 (1912).

♂. Head pale yellow with a dark brown patch on frons and slight streak on vertex, the palpi and antennæ dark brown; thorax

and abdomen dark brown, the tegulæ at sides and shoulders pale yellow; pectus, legs, and ventral surface of abdomen yellow, the fore legs brown in front. Fore wing dark brown; a yellowish white patch in cell and submedian interspace from base to near middle, a patch in end of cell with an oblique bar from just below its extremity to vein 1, a wedge-shaped postmedial patch below costa, and the termen yellowish white; cilia white, brown towards apex. Hind wing dark brown. Underside of both wings uniform dark brown.

♀. Fore wing with some orange-yellow at base of cell, a slight yellowish white streak on median nervure and patch in end of cell, a wedge-shaped postmedial patch below costa.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♂, ♀ in Coll. Rothschild; Goodenough I. (*Meek*), 2 ♀. *Exp.*, ♂ 22, ♀ 26 millim.

*204*c*. **Chrysoscota conjuncta.** (Plate XXV. fig. 30.)

Chrysoscota lacteiplaga, ab. *conjuncta*, Roths. Nov. Zool. xix. p. 216 (1912).

♂. Head pale yellow, the palpi, frons, and antennæ dark brown; thorax and abdomen dark brown, the tegulæ pale yellow with dark brown spot at tips, the shoulders pale yellow; pectus, legs, and ventral surface of abdomen yellow, the fore and mid legs brown in front. Fore wing dark brown irrorated with pale yellow, especially on terminal area; a pale yellow patch in and below basal half of cell conjoined to a patch in end of cell, which again is conjoined to a band beyond the cell from vein 6 to inner margin. Hind wing dark brown. Underside uniform brown.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

*204*d*. **Chrysoscota flavostrigata.** (Plate XXV. fig. 31.)

Chrysoscota flavostrigata, Beth.-Baker, Nov. Zool. xi. p. 417 (1904).

♀. Head yellow, palpi except at base and antennæ black-brown; frons and vertex of head with black-brown patches; tegulæ yellow with brown medial patch; thorax dark brown with yellow patch on shoulders; fore coxæ streaked with yellow, mid and hind coxæ with yellow spots; tarsi slightly ringed with yellow; abdomen black-brown with lateral yellowish stripes and the anal tuft yellow. Fore wing brown with a golden gloss; a yellowish white fascia in cell from base to a wedge-shaped patch in end of cell confluent with an oblique mark from costa beyond middle; a narrow yellowish terminal band. Hind wing fuscous.

Hab. Br. N. Guinea, Up. Aroa R. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 26 millim.

204 *e*. **Chrysoscota brunnea.** (Plate XXV. fig. 32.)

Phæosia brunnea, Swinh. A. M. N. H. (7) xv. p. 497 (1905).

Head and thorax brown; abdomen fuscous brown, the ventral surface whitish. Fore wing grey-brown irrorated and suffused with reddish brown, a somewhat paler patch in end of cell with dark streak before it, and spots at middle and beyond it; a dark spot on costa before apex and a series of ill-defined dark subterminal marks. Hind wing fuscous brown.

Hab. SUMATRA, 1 ♀; BORNEO, Sarawak, 1 ♂ type; QUEENSLAND, Kuranda (*Dodd*), 1 ♂, 1 ♀. *Exp.* 22 millim.

208. **Nishada impervia**, insert (syns.):—

Nishada melanopa, Beth.-Baker, Nov. Zool. xi. p. 417, pl. v. f. 19 (1904).
Ilema unicolora, Beth.-Baker, Nov. Zool, xi. p. 420, pl. v. f. 31 (1904).
Ilema testaceoflava, Roths. Nov. Zool. xix. p. 221 (1912), ♀ (nec ♂).

BR. N. GUINEA, Dinawa (*Pratt*), types † *melanopa* and *unicolora* in Coll. Bethune-Baker.

208 *a*. **Nishada melanistis.** (Plate XXV. fig. 33.)

Nishada melanistis, Swinh. A. M. N. H. (7) ix. p. 80 (1902).

♂. Head orange; tegulæ orange with black spots; thorax black, the base of patagia orange; pectus and legs orange; abdomen orange, the dorsal surface black except at extremity. Fore wing black-brown, the base and costal area yellowish white; cilia yellowish white on apical half. Hind wing orange, the termen suffused with fuscous on apical half. Underside of fore wing with the costal area and apical half of cilia more orange; hind wing wholly orange.

Hab. BORNEO, Kina Balu, 2 ♂ type. *Exp.* 28 millim.

*208 *b*. **Nishada aurantiaca.**

Nishada aurantiaca, Roths. Nov. Zool. xx. p. 224 (1913).

Hind wing of male with comb of long downturned thick hairlike scales on vein 8 above end of cell on underside, the submedian fold

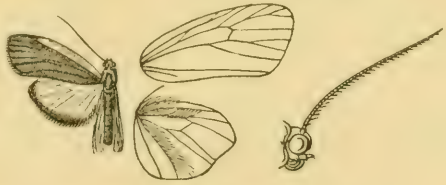

Fig. 87.—*Nishada aurantiaca*, ♂. ½.

with fringe of long spatulate scales from base to near termen; abdomen with lateral tufts of very long hair from base.

♂. Head orange-yellow, the vertex black-brown; thorax very dark red-brown, the edges of tegulæ and spots on shoulders orange-yellow; pectus, legs, and abdomen orange-yellow, the last with some dark brown at base of dorsum and before anal tuft. Fore wing very dark red-brown with a broad orange-yellow costal fascia from base to beyond middle, the costal edge black towards base. Hind wing orange-yellow, the termen narrowly dark red-brown. Underside of fore wing with the inner area whitish to beyond middle.

Hab. N. Celebes, Toli-toli (*Frühstorfer*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

213. **Nishada flabrifera.**

Larva. Piepers, Tijd. v. Ent. xlvii. p. 141, pl. x. f. 3.

Dorsal area black, ventral area grey; intersegmental white lines; each somite with a lateral brown wart; clothed with black hair, the 1st somite with lateral pencils of long hair. Food-plant, *Muscus*.

214. **Nishada sambara**, insert (syn.):—

Nishada flavens, Roths. Nov. Zool. xix. p. 216 (1912).

Java, type † ♂ in Coll. Rothschild.

215 *a*. **Nishada brunneipennis.** (Plate XXV. fig. 34.)

Nishada brunneipennis, Hmpsn. A. M. N. H. (8) viii. p. 401 (1911).

♂. Head and tegulæ orange-yellow; palpi brown at tips; antennæ brown; tegulæ with brown patches; thorax dark brown with some orange-yellow at base of patagia and a patch on metathorax; pectus and legs yellow, the latter brown above; abdomen dark brown, the ventral surface yellow. Fore wing brown with a yellow spot at base of costa. Hind wing brown, the costal area whitish. Underside of fore wing with the basal half whitish except the costal area.

♀. Hind wing uniform pale brown; the underside of both wings wholly brown.

Hab. Moluccas, Batian (*Doherty*), 3 ♂, 1 ♀ type. *Exp.* ♂ 22–24, ♀ 26 millim.

Page 115. *Lexis* is a synonym of **Chionæma**, and the genus will stand as

TIGRIOIDES, insert:—

	Type.
Parapelosia, Beth.-Baker, Nov. Zool. xv. p. 192 (1908)	*grisescens*.

217 *a*. **Tigrioides phæola**, trans. from p. 119.

217 *b*. **Tigrioides laniata**, n. sp.

Antennæ of male bipectinate with moderate branches except at apex; fore wing with the inner margin somewhat lobed, an upturned fringe of long hair below end of cell on underside, the costa with a fold on underside, the subcostal nervure curved downwards, veins 10 and 11 arising from a point, 11 bent upwards and becoming coincident with 12; hind wing with the costa highly lobed towards apex and clothed with long hair on upperside.

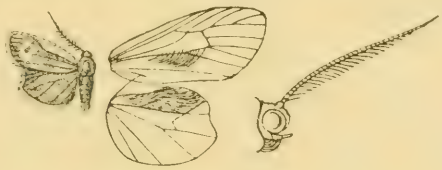

Fig. 88.— *Tigrioides laniata*, ♂. ½.

♂. Head, thorax, and abdomen pale grey, the anal tuft white, the antennæ brownish. Fore wing pale glossy grey, the costal edge blackish towards base; cilia white. Hind wing pale grey, the cilia white.

♀. Head, thorax, and abdomen white, the antennæ brown; fore wing glossy white; hind wing white.

Hab. Dutch N. Guinea, Swaka R. (*Wollaston*), 1 ♂, 1 ♀ type. *Exp.* 22 millim.

219. **Tigrioides puncticollis.**

Larva. Piepers, Tijd. v. Ent. xlvii. p. 142.

Short, dark, clothed with long hair. Food-plant, *Musœus*.

222. **Tigrioides quadrinotata**, del. *Lithosia bipunctigera*.

222 *a*. **Tigrioides termineola**. (Plate XXV. fig. 35.)

Tigrioides termineola, Hmpsn. A. M. N. H. (7) xix. p. 230 (1907).

♀. Head and thorax fulvous orange; palpi, frons, tibiæ, and tarsi blue-black; antennæ blackish; pectus mostly fuscous; abdomen yellow with lateral fuscous stripes. Fore wing fulvous orange; a black streak in submedian fold from middle to termen; a terminal blue-black band, expanding below apex and narrow towards tornus; cilia blue-black. Hind wing pale ochreous, the veins brownish; a dark terminal line expanding into a narrow purplish fuscous band towards apex; cilia purplish fuscous except towards tornus.

Hab. Gold Coast, Kumasi (*Whiteside*), 1 ♀ type. *Exp.* 28 millim.

*223 *a*. **Tigrioides pyralina.** (Plate XXVI. fig. 1.)

Ilema pyralina, Roths. Nov. Zool. xix. p. 220 (1912).

♀. Head ochreous yellow; antennæ brownish; thorax brown, the patagia yellow at base; pectus and legs ochreous suffused with brown; abdomen brown, the anal tuft and ventral surface ochreous. Fore wing red-brown, the base and costal area to beyond middle yellowish white. Hind wing pale yellow, the terminal area red-brown, broadly at costa, narrowing to tornus.

Hab. Sumbawa, Tambora (*Doherty*), type † ♀ in Coll. Rothschild. *Exp.* 18 millim.

226 *a*. **Tigrioides minima.** (Plate XXVI. fig. 2.)

Lexis minima, Hmpsn. A. M. N. H. (7) xi. p. 342 (1903).

♂. Uniform bright silky straw-colour; fore wing with vein 6 from the cell; hind wing slightly paler.

Hab. N. Guinea, Port Moresby (*Kowald*), 2 ♂ type. *Exp.* 16 millim.

227 *a*. **Tigrioides grisescens.** (Plate XXVI. fig. 3.)

Parapelosia grisescens, Beth.-Baker, Nov. Zool. xv. p. 192 (1908).

♀. Head and thorax rufous mixed with whitish; abdomen greyish suffused with fuscous. Fore wing whitish thickly irrorated with rufous, the costal area less thickly irrorated; a diffused antemedial rufous streak below the cell, another streak on medial part of costa, and short streaks in and beyond end of cell; a postmedial spot on costa; an oblique fascia from apex; the veins of terminal area streaked with rufous. Hind wing grey tinged with rufous.

Hab. Br. N. Guinea, Owgarra (*Meek*), 1 ♀. *Exp.* 24 millim. Type † ♀ in Coll. Bethune-Baker.

227 *b*. **Tigrioides euscia**, n. sp. (Plate XXVI. fig. 4.)

♀. Head whitish, the antennæ brown except at base; thorax whitish suffused with red-brown; abdomen whitish, the terminal half of dorsum suffused with fuscous. Fore wing whitish, thickly irrorated with red-brown; a faint triangular red-brown antemedial shade from cell to inner margin; a postmedial red-brown shade, incurved below vein 4. Hind wing white, the terminal area suffused with brown to vein 2. Underside of fore wing suffused with brown.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), 1 ♀ type. *Exp.* 24 millim.

Page 119. Under **PUSIOLA** insert:—

	Type.
Pusiolania, Strand, Arch. Naturg. lxxvii. 9, p. 93 (1912).....	*occidentalis*.

Genus **STENILEMA**.

Stenilema, Hmpsn. A. M. N. H. (8) iv. p. 352 (1909) ..... Type. *aurantiaca*.

Proboscis fully developed; palpi porrect, hardly extending beyond the frons which is smooth; antennæ of male minutely serrate with fasciculate cilia; tibiæ with the spurs short. Fore wing narrow, the apex rounded, the termen obliquely curved; vein 2 from towards end of cell, oblique; 3, 4 coincident; 5 absent; 6 from upper angle; 7, 8, 9 stalked, 7 from before 9; 10 from cell; 11 anastomosing with 12. Hind wing with veins 3, 4 coincident; 5 absent; 6, 7 stalked; 8 from middle of cell.

In key differs from *Blavia* in the fore wing having vein 6 from angle of cell.

229 *a*. **Stenilema aurantiaca**.

Stenilema aurantiaca, Hmpsn. A. M. N. H. (8) iv. p. 353 (1909).

♂. Head and base of tegulæ orange; antennæ brown; tips of tegulæ and thorax fuscous tinged with leaden grey; pectus, legs,

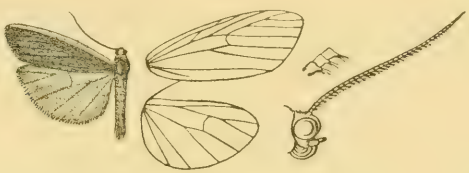

Fig. 89.—*Stenilema aurantiaca*, ♂. ½.

and abdomen deep orange. Fore wing leaden grey, a costal fascia, a fascia on base of inner margin and the cilia deep orange. Hind wing deep orange.

Hab. Abyssinia (*Drake-Brockman*), 1 ♂ type. *Exp.* 34 millim.

Genus **LEPIDILEMA**.

Lepidilema, Auriv. Sjost. Kilimanjaro-Meru Exp. ii. 9, p. 26 (1910) ..... Type. *unipectinata*.

Proboscis fully developed; palpi short, porrect; frons smooth; antennæ of male pectinate with rather long branches to near apex on outer side, with serrations and bristles on inner side. Fore wing rather narrow and elongate; male with a small costal fold on upperside to near apex; vein 2 from towards angle of cell, oblique; 3, 4 stalked; 5 absent; 9 from 10 anastomosing with 7, 8 to form the areole, 6 from end of areole, 7 from beyond 9; 11 from cell, free. Hind wing with vein 2 from towards end of cell: 3, 4 stalked; 5 absent; 6, 7 stalked; 8 from middle of cell.

In key differs from *Pusiola* in the fore wing having an areole and vein 11 free.

*229 *b*. Lepidilema unipectinata.

Lepidilema unipectinata, Auriv. Sjost. Kilimanjaro-Meru Exp. ii. 9, p. 26, pl. 1. f. 11 (1910).

♂. Head and thorax yellowish suffused with red-brown; antennæ with the branches brown; abdomen yellow. Fore wing yellowish suffused with purplish fuscous, especially on basal half

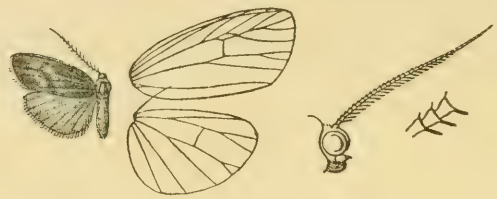

Fig. 90.—*Lepidilema unipectinata*, ♂. ½.

and terminal area; a rather diffused maculate dark postmedial line, excurved to discal fold, then oblique. Hind wing yellow. Underside of fore wing purplish fuscous, the costal area and terminal area broadly fulvous yellow.

Hab. Germ. E. Africa, Kilima'njaro, Kibonota (*Sjostedt*), type † ♂ in Mus. Stockholm. *Exp.* 26 millim.

Genus **CROCOSIA**, nov.

Type, *C. phæocraspis*.

Proboscis fully developed; palpi porrect, not reaching beyond the frons which is smooth; eyes large, round; antennæ of male ciliated; tibiæ with the spurs short. Fore wing long and narrow; vein 2 from well before middle of cell, oblique; 3, 4 stalked; 5 absent; 6 from upper angle; 7, 8, 9 stalked; 10 from cell; 11 anastomosing with 12. Hind wing with the cell long; vein 2 from middle; 3, 4 stalked; 5 absent; 6, 7 stalked; 8 from middle of cell.

In key differs from *Phryganopsis* in the fore wing being long and narrow, with vein 2 from well before middle of cell.

229 *c*. Crocosia phæocraspis, n. sp.

♂. Head and thorax fulvous orange; the femora at extremities,

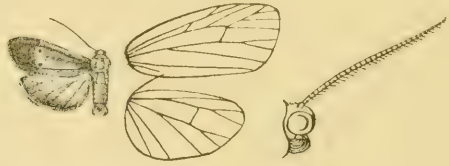

Fig. 91.—*Crocosia phæocraspis*, ♂. ½.

tibiæ, and tarsi blackish; abdomen brownish yellow. Fore wing fulvous orange, the terminal area grey-brown with a purplish tinge;

small postmedial black spots beyond the cell and above vein 1. Hind wing ochreous yellow, the cell tinged with fulvous, the termen with grey-brown.

Hab. Gold Coast, Bibianaha (*Spurrell*), 1 ♂ type, Kumasi (*Sanders*), 1 ♂. *Exp.* 26 millim.

230 *a*. **Phryganopsis plumosa.**

Phryganopsis plumosa, Mab. Ann. Soc. Ent. Fr. 1899, p. 726.

Antennæ bipectinate with moderate branches, the shaft thickened above at base.

Grey-brown. Fore wing with greyish streak on vein 1; a black discoidal spot. Hind wing pale grey tinged with ochreous.

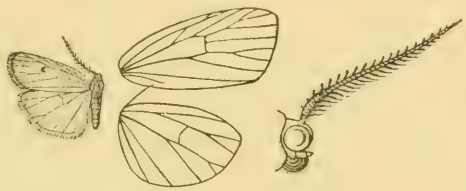

Fig. 92.—*Phryganopsis plumosa*, ♂. ⅔.

Hab. W. Africa (*Dudgeon*), 1 ♀; Nyasaland, Up. Shiré R. (*de Jersey*), 1 ♂; Madagascar, Baie D'Antongil (*Mocquerys*), type † ♂ in Coll. Mabille. *Exp.* 18 millim.

230 *b*. **Phryganopsis unipuncta.** (Plate XXVI. fig. 5.)

Phryganopsis unipuncta, Hmpsn. A. M. N. H. (7) xv. p. 433 (1905).

Head and thorax brownish ochreous; fore and mid legs suffused with fuscous; abdomen yellowish white. Fore wing ochreous suffused with brownish; a small round black discoidal spot. Hind wing yellowish white.

Hab. Algeria, Hammam-es-Salahin (*Walsingham*), 2 ♂, 4 ♀ type. *Exp.* 20 millim.

*230 *c*. **Phryganopsis elongata.**

Phryganopsis elongata, Auriv. Sjost. Kilimanjaro-Meru Exp. ii. 9, p. 25 (1910).

Antennæ of male bipectinate, with short fasciculate branches; fore wing with streak of androconia at middle of subcostal nervure on underside.

♂. Head and thorax red-brown, the frons more fulvous brown; fore tibiæ and tarsi dark brown; abdomen fulvous brown. Fore

wing narrow and elongate; uniform fulvous brown. Hind wing reddish ochreous. Underside of fore wing red-brown, the streak of androconia and costa towards apex fulvous.

Fig. 93.—*Phryganopsis elongata*, ♂. ½.

Hab. Germ. E. Africa, Kilima'njaro, Kiboscho (*Sjostedt*), type † ♂ in Mus. Stockholm. *Exp.* 38 millim.

230 *d*. **Phryganopsis hemiphæa.**

Phryganopsis hemiphæa, Hmpsn. A. M. N. H. (8) iv. p. 353 (1909).

Antennæ of male serrate and fasciculate; fore wing with vein 6 stalked with 7, 8, 9.

♂. Head and thorax orange; antennæ brown except at base; tibiæ and tarsi brown; abdomen orange dorsally tinged with brown except at extremity. Fore wing with the costal half yellow

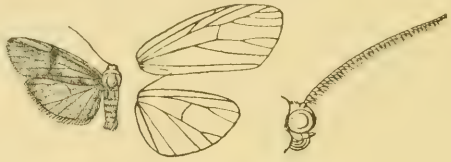

Fig. 94.—*Phryganopsis hemiphæa*, ♂. ½

extending to inner margin near base and narrowing to a point at apex, the costa orange, the inner half grey-brown; an erect fuscous band just beyond middle. Hind wing pale yellow, the termen grey-brown towards apex.

Hab. Uganda, White Nile Gondokoro (*Reynes-Cole*), 1 ♂ type. *Exp.* 30 millim.

230. **Phryganopsis costimacula**, insert (syn.):—

Ilema quadripunctata, Roths. Nov. Zool. xix. p. 223 (1912).

Nigeria, Ogruga, type † ♂ in Coll. Rothschild.

231. **Phryganopsis asperatella**, insert (syn.):—

Phryganopsis subasperatella, Strand, Arch. Naturg. lxxviii. 7, p. 173 (1912).

231 *a*. **Phryganopsis celida.** (Plate XXVI. fig. 6.)

Ilema celida, Beth.-Baker, A. M. N. H. (8) vii. p. 536 (1911).

Head and thorax ochreous yellow; palpi blackish at sides; pectus and legs tinged with brown; abdomen pale ochreous yellow, ventrally tinged with brown. Fore wing ochreous yellow slightly irrorated with brown scales; a black discoidal spot. Hind wing pale yellow. Underside of fore wing with fuscous suffusion in, below, and beyond the cell.

Hab. Sierra Leone (*Clements*), 1 ♂; Gold Coast, Bibianaha (*Spurrell*), 2 ♂, 1 ♀; N. Angola, N'Dalla Tando (*Ansorge*), type † ♂ in Coll. Bethune-Baker. *Exp.* 22 millim.

*231 *b*. **Phryganopsis albescens.** (Plate XXVI. fig. 7.)

Phryganopsis albescens, Auriv. Sjost. Kilimanjaro-Meru Exp. ii. 9, p. 24 (1910).

♀. Head and thorax whitish tinged with red-brown; antennæ tinged with fuscous except at base; abdomen yellow. Fore wing whitish tinged with pale red-brown and slightly irrorated with dark brown; a slight dark postmedial shade from submedian fold to inner margin. Hind wing pale yellow.

Hab. Germ. E. Africa, Kilima'njaro, Kibonota (*Sjostedt*), type † ♀ in Mus. Stockholm. *Exp.* 32 millim.

231 *c*. **Phryganopsis flavicosta.** (Plate XXVI. fig. 8.)

Phryganopsis flavicosta, Hmpsn. A. M. N. H. (7) viii. p. 179 (1901).

Head, thorax, and abdomen orange; fore tibiæ at extremity and tarsi above tinged with fuscous; metathorax whitish. Fore wing dull yellowish white with narrow yellow costal fascia; the termen and cilia tinged with orange. Hind wing pale yellow.

Hab. Sierra Leone (*Clements, Austen*), 1 ♂, 1 ♀ type. *Exp.* 30 millim.

*231 *d*. **Phryganopsis curta.** (Plate XXVI. fig. 9.)

Onychipoda curta, Roths. Nov. Zool. xix. p. 230 (1912).

♂. Head, tegulæ, and shoulders orange-yellow; antennæ pale brown, the shaft whitish above; palpi brown; thorax pale brown; pectus, legs, and abdomen orange-yellow, the fore legs dark brown. Fore wing pale glossy grey with a pale orange-yellow costal fascia of nearly even width throughout; cilia yellow. Hind wing pale yellow.

Hab. Angola, Bihé, type † ♂ in Coll. Rothschild. *Exp.* 32 millim.

232 *a*. **Phryganopsis straminea.** (Plate XXVI. fig. 10.)

Phryganopsis straminea, Hmpsn. A. M. N. H. (7) viii. p. 179 (1901).

♀. Straw-yellow; abdomen brownish grey with the anal tuft ochreous. Fore wing slightly irrorated with brown. Hind wing pale yellow.

Hab. Br. E. Africa, Uganda Ry., Mile 478 (*Betton*), 1 ♀ type. *Exp.* 24 millim.

*232 *b*. **Phryganopsis squamosa.** (Plate XXVI. fig. 11.)

Ilema squamosa, Beth.-Baker, A. M. N. H. (8) vii. p. 536 (1911).

♂. Head brownish white; thorax and abdomen grey-white mixed with blackish; palpi and frons blackish; legs and ventral surface of abdomen brownish white. Fore wing brownish white irrorated with brown scales, the costa browner. Hind wing brownish white.

Hab. Portuguese W. Africa, Malanga, type † ♂ in Coll. Bethune-Baker. *Exp.* 22 millim.

232 *c*. **Phryganopsis interstiteola**, n. sp. (Plate XXVI. fig. 12.)

♂. Head and thorax pale ochreous faintly tinged with red-brown, abdomen pale ochreous. Fore wing pale ochreous, the costal edge rather deeper ochreous, the interspaces with faint diffused pale red-brown fasciæ. Hind wing pale ochreous. Underside of fore wing pale red-brown, the costa fulvous yellow except towards base; hind wing with the costa pale red-brown.

Hab. Transvaal, Lydenburg, 1 ♂ type. *Exp.* 26 millim.

232 *d*. **Phryganopsis ochreata.** (Plate XXVI. fig. 13.)

Phryganopsis ochreata, Hmpsn. A. M. N. H. (7) viii. p. 179 (1901).

♀. Head and thorax ochreous; abdomen grey, the extremity orange. Fore wing brownish ochreous, the costa and termen tinged with orange. Hind wing grey-brown.

Hab. Br. C. Africa, Chiromo (*De Jersey*), 1 ♀ type. *Exp.* 20 millim.

233 *a*. **Phryganopsis atrescens.** (Plate XXVI. fig. 14.)

Phryganopsis atrescens, Hmpsn. A. M. N. H. (7) xi. p. 343 (1903).

♀. Black-brown; palpi, back of head, tegulæ, stripes on legs, ventral surface of abdomen and anal tuft orange-yellow. Fore wing with the costal area orange-yellow narrowing to a point before apex; cilia yellow. Hind wing with the termen and cilia yellow, diffused inwards in submedian interspace.

Hab. Cape Colony, Grahamstown, 1 ♀ type. *Exp.* 22 millim.

*233 *b*. Phryganopsis amaurobapha.

Lithosia amaurobapha, Mab. Ann. Soc. Ent. Fr. 1899, p. 725.

Fore wing with an areole, vein 6 arising from it.

♀. Grey-brown. Fore wing thickly irrorated with darker scales; an indistinct punctiform postmedial line arising from costa just beyond middle, very oblique to vein 7 towards termen then incurved to below end of cell at submedian fold where there is a larger spot. Hind wing pale yellowish, the termen tinged with brown from apex to vein 2.

Hab. Madagascar, Baie d'Antongil (*Mocquerys*), type † ♀ in Mus. Paris. *Exp.* 22 millim.

The distinction between this genus and *Isorropus* will have to be changed in the key and based on the tuft of scales on antennæ and anastomosis of vein 11 with 12.

236 *a*. Mithuna arizana. (Plate XXVI. fig. 15.)

Mithuna arizana, Wileman, Entom. xliv. p. 109 (1911).
Mithuna arizana, ab. *parva*, Wileman, Entom. xliv. p. 109 (1911).

Head and thorax pale reddish brown; palpi blackish at tips; abdomen grey tinged with red-brown. Fore wing pale reddish brown with slight dark irroration; a small blackish spot on costa above end of cell with oblique dark line from it to inner margin before middle; a slight dark point at lower angle of cell; a diffused oblique subterminal line with series of blackish spots on it; a terminal series of slight dark striæ usually present. Hind wing grey suffused with brown.

Ab. 1. *parva*. Smaller.

Hab. Formosa, Arizan (*Wileman*), 1 ♀, Kanshirei (*Wileman*), 3 ♂, 2 ♀. *Exp.* 26, *parva* 18, millim. Type † ♂ ♀, and type † ♂ *parva* in Coll. Wileman.

239 *a*. Metura albicosta, n. sp.

Fore wing with veins 3, 4 stalked; hind wing with veins 6, 7 strongly stalked.

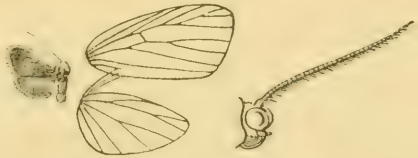

Fig. 95.—*Metura albicosta*, ♀. ½.

♀. Head, thorax, and abdomen fuscous brown, the tegulæ and patagia white. Fore wing pale fuscous brown, the costa and cilia

white. Hind wing pale fuscous brown. Underside fuscous brown, the cilia of fore wing white.

Hab. Dutch N. Guinea, Snow Mts., Oetakwa R. (*Meek*), 1 ♀ type. *Exp.* 18 millim.

Page 125. Genus **PARABLAVIA**, insert:—

Type.

Progona, Berg. An. Soc. Argent. xiii. p. 182 (1882) ..... *luridipennis*,

which has precedence.

*242 *a*. **Progona luridipennis.** (Plate XXVI. fig. 16.)

Cydosia luridipennis, Burm. Descr. Rep. Argent. v. p. 423 (1878); Kirby, Cat. Het. p. 334.

♂. Head and thorax whitish and pale fulvous; abdomen dark brown, the ventral surface pale fulvous. Fore wing fulvous brown, the veins and costal area whitish. Hind wing dark brown.

Hab. Argentina, Cordova, type † ♂ in Mus. Buenos Ayres. *Exp.* 26 millim.

247. **Crambidia cephalica**, Grote & Rob., with the head yellow, is a distinct species.

247 *a*. **Crambidia suffusa.** (Plate XXVI. fig. 17.)

Crambidia suffusa, Barnes & McD. Contr. Nat. Hist. Lep. N. Am. i. 5, p. 3, pl. ii. f. 16 (1912).

♂. Head pale fulvous yellow; antennæ fuscous; thorax white suffused with reddish brown, the legs suffused with fuscous; abdomen grey, the extremity pale fulvous yellow. Fore wing white tinged with pale brown; a pure white subcostal stripe; the costal edge fuscous towards base. Hind wing pale brown, the cilia white. Underside of fore wing brown.

Hab. U.S.A., California, San Diego (*Field*), 2 ♂ cotypes. *Exp.* 34 millim.

*247 *b*. **Crambidia roberto.** (Plate XXVI. fig. 18.)

Crambidia roberto, Dyar, J. N.Y. Ent. Soc. xv. p. 227 (1907).

♂. Frons yellow; vertex of head orange; antennæ blackish; thorax and abdomen fuscous grey. Fore wing uniform whitish grey. Hind wing fuscous grey.

Hab. Mexico, Mexico City (*Müller*), type † ♂ in U.S. Nat. Mus. *Exp.* 30 millim.

247 *c*. **Crambidia pura.** (Plate XXVI. fig. 19.)

Crambidia pura, Barnes & McD. Contr. Nat. Hist. Lep. N. Am. ii. 3, p. 101, pl. iv. ff. 5, 6 (1913).

♂. Head, thorax, and abdomen pure white; antennæ tinged with fuscous; legs fuscous in front; abdomen with the ventral surface tinged with fuscous. Fore wing silvery white. Hind wing white. Underside of fore wing, except inner area, and costal area of hind wing suffused with fuscous.

Hab. U.S.A., N. Carolina, Southern Pines, Texas, 1 ♂. *Exp.* 26 millim.

247 *d*. **Crambidia impura.** (Plate XXVI. fig. 20.)

Crambidia casta, ab. 2, Hmpsn. Cat. Lep. Phal. B.M. ii. p. 127.
Crambidia impura, Barnes & McD. Contr. Nat. Hist. Lep. N. Am. ii. 3, p. 101, pl. iv. f. 4 (1913).

♂. Head and thorax white tinged with fuscous; antennæ and legs fuscous; abdomen white. Fore wing silvery white. Hind wing white tinged with fuscous. Underside pale fuscous, the inner area of hind wing white.

Hab. U.S.A., Colorado (*Cockerell*), 1 ♂, Denver (*Oslar*), 1 ♂, Arizona, Palmerlee, 1 ♂ cotype. *Exp.* 34 millim.

*248 *a*. **Crambidia dusca.**

Crambidia dusca, Barnes & McD. Contr. Nat. Hist. Lep. N. Am. ii. 3, p. 101, pl. iv. f. 7 (1913).

♂. Head deep grey; thorax paler grey; abdomen grey. Fore wing grey with an ochreous tinge, the interspaces irrorated with fuscous leaving the veins slightly paler. Hind wing fuscous brown. Underside fuscous brown, the costa of fore wing slightly paler.

Hab. U.S.A., California, San Diego. *Exp.* 26 millim. This species is unknown to me.

Genus **PSEUDOSCAPTIA**, nov.

Type, *P. bicolor*.

Proboscis fully developed; palpi porrect, short, fringed with hair; antennæ of male ciliated; tibiæ with the spurs short. Fore wing long and narrow, the apex rounded, the termen evenly curved; vein 2 from middle of cell, curved at base; 3, 4 coincident; 5 absent; 6 from below upper angle of cell; 7, 8, 9 stalked, 7 from beyond 9; 10, 11 from cell, 11 anastomosing with 12. Hind wing with vein 2 from middle of cell; 3, 4 on a long stalk; 5 absent; 6, 7 stalked; 8 from middle of cell.

In key differs from *Phæosia* in the fore wing having no areole and vein 7 from 8 beyond 9.

*248 *b*. Pseudoscaptia bicolor.

Scaptosyle bicolor, Roths. Nov. Zool. xix. p. 241 (1912).

♂. Head black-brown; thorax golden-yellow; pectus and legs dark brown, the fore coxæ with yellow patches; abdomen black-brown with some yellow at base, the ventral surface with yellow bands. Fore wing golden yellow; the terminal area dark reddish

Fig. 96.—*Pseudoscaptia bicolor*, ♂. ½.

brown glossed with metallic-blue, its inner edge oblique and sinuous. Hind wing golden yellow; a terminal deep reddish-brown band, rather broad at costa, narrowing to a point near tornus.

Hab. Malay Peninsula, Padang Rengas, type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

249 *a*. Phæosia orientalis.

Phæosia orientalis, Hmpsn. A. M. N. H. (7) xv. p. 433 (1905).

Fore wing of male with the cell very narrow, with a fold in it and fringe of scales on upperside; the inner margin strongly lobed before middle.

♂. Head, thorax, and abdomen fulvous yellow, the last greyish

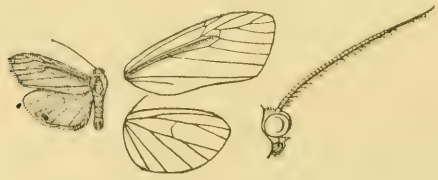

Fig. 97.—*Phæosia orientalis*, ♂. ½.

towards base. Fore wing orange-yellow, the area below the cell flesh-coloured; a small rather elongate blackish patch above end of cell. Hind wing orange-yellow, the terminal area paler.

Hab. Singapore (*Ridley*), 1 ♂; Borneo, Kuching (*Shelford*), 1 ♂ type. *Exp.* 26 millim.

250. **Sozusa scutellata**, del. *Lithosia natalica*.

251. **Macrosia fumeola**, insert (syn.) :—

Lithosia natalica, Möschl. Stett. Ent. Zeit. xxxiii. p. 354 (1872).

251 *a*. **Macrosia chalybeata.** (Plate XXV. fig. 36.)

Macrosia chalybeata, Hmpsn. A. M. N. H. (7) viii. p. 179 (1901).

Head and tegulæ at base orange; thorax blue-grey with orange patch on metathorax; pectus and legs orange, the mid and hind femora above fuscous; abdomen orange, dorsally greyish towards base. Fore wing steely blue-grey, the costa and cilia orange. Hind wing orange.

Ab. 1. Fore wing with the termen yellow.

Hab. Br. E. Africa, Eb Urru (*Betton*), 3 ♀ type, S. Kavirondo, Kenyamkaga (*Neave*), 1 ♂, Kuja Valley (*Neave*), 1 ♀; Br. C. Africa, Mombera Distr. (*Neave*), 1 ♀; Mashonaland, Salisbury (*Marshall*), 2 ♂, 1 ♀; Transvaal (*Pead, Cholmley*), 1 ♂, 2 ♀, Pretoria (*Distant*), 2 ♀, Johannesburg (*Ross*), 1 ♀, Grœnvley (*Janse*), 1 ♀; Basutoland, Maseru (*Crawshay*), 1 ♀; Cape Colony, Deelfontein (*Sloggett*), 1 ♀, Zuurburg (*Bairstow*), 1 ♀. *Exp.* 28–42 millim.

Genus **LOPHILEMA.**

Lophilema, Auriv. Sjost. Kilimanjaro-Meru Exp. ii. 9, p. 26 (1910) ..... Type. *polioplaga*.

Proboscis fully developed; palpi short, porrect; frons smooth; antennæ of male with long bristles and cilia. Fore wing long and narrow; vein 2 from middle of cell, curved at base; 3, 4 coincident; 5 absent; 6 from below upper angle; 7, 8, 9 stalked; 10, 11 from cell; male with a large triangular patch of androconia on upperside in and below terminal half of cell. Hind wing very ample; vein 2 from middle of cell; 3, 4 stalked; 5 absent; 6, 7 stalked; 8 from middle of cell.

In key differs from *Macrosia* in the fore wing having vein 6 from below angle of cell and no areole.

251 *b*. **Lophilema polioplaga.**

Macrosia polioplaga, Hmpsn. A. M. N. H. (7) viii. p. 180 (1901).
Lophilema sordida, Auriv. Sjost. Kilimanjaro-Meru Exp. ii. 9, p. 26 (1910).

♂. Head, thorax, and abdomen red-brown. Fore wing bright red-brown; a grey triangular patch from cell before middle to discocellulars where it extends from upper angle of cell to vein 1, a fuscous point on its lower edge near its base just below median nervure and a discoidal lunule. Hind wing very ample, yellowish brown, the disk rather redder brown and with some long hairs on upperside in the cell.

Hab. Br. E. Africa, Uganda Ry., Mile 478 (*Betton*), 1 ♂ type; Germ. E. Africa, Kilima'njaro, Kibonoto (*Sjostedt*),

Fig. 98.—*Lophilema polioplaga*, ♂. ½.

type† ♂ *sordida* in Mus. Stockholm, in bad condition with the patch of androconia turned fuscous. *Exp.* 44 millim.

*251 *c*. **Lophilema brunneotincta.** (Plate XXVI. fig. 21.)

Ilema brunneotincta, Roths. Nov. Zool. xix. p. 222 (1912).

♀. Head and thorax dark greyish brown, the edges of patagia and metathorax ochreous; palpi except at tips and pectus ochreous yellow; abdomen grey suffused with brown, the ventral surface reddish ochreous. Fore wing grey-brown with some ochreous white at base of inner margin. Hind wing semihyaline ochreous white, the apex tinged with brown; the underside tinged with brown.

Hab. Cape Colony, Nieuw-velt Mts. (*Mrs. Butt*), type† ♀ in Coll. Rothschild. *Exp.* 46 millim.

Page 130. Under **CTENOSIA** insert:—

	Type.
Paradohertya, Beth.-Baker, Nov. Zool. xi. p. 421 (1904)	*trifascia.*

*252 *a*. **Ctenosia trifascia.**

Paradohertya trifascia, Beth.-Baker, Nov. Zool. xi. p. 421, pl. iv. f. 36 (1904), ♀.

Chionæma albomaculata, Beth.-Baker, Nov. Zool. xi. p. 422, pl. iv. f. 35 (1904), ♂.

Fore wing with vein 10 from before 7; male with fringe of very long downturned hair and scales in cell on upperside, the base of inner margin lobed with fringe of short downturned hair above it; the underside with large elliptical white glandular swelling in a fovea in cell which is very narrow, the subcostal nervure and veins arising from it much downcurved; hind wing with the middle of costa lobed, vein 8 downcurved below it; a fold and fringe of hair on inner area; antennæ of male ciliated.

♂. Head, thorax, and abdomen bright red-brown, the vertex of head and base of antennæ and patches on patagia white; fore tibiæ mostly white in front; genital tufts pale yellowish. Fore wing bright red-brown; a white patch at base; antemedial white patches on costa and inner margin; larger postmedial patches on costa and inner margin and a large patch extending obliquely from apex towards end of cell; cilia white. Hind wing pale red-brown.

Fig. 99.—*Ctenosia trifascia*, ♂, ♀. ½.

♀. Fore wing with the white basal patch large and extending obliquely on inner area; the ante- and postmedial patches forming bands with waved edges, the former oblique, the latter angled inwards and confluent with the former in cell.

Hab. Br. N. Guinea, Up. Aroa R. (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* 24 millim.

252 *b*. Ctenosia albiceps.

Ctenosia albiceps, Hmpsn. A. M. N. H. (7) viii. p. 180 (1901).

♀. Fore wing with vein 10 from before 7.

Deep red-brown; upper part of frons and vertex of head pure

Fig. 100.—*Ctenosia albiceps*, ♀. ½.

white; fore legs with the extremity of tibiæ and rings on 1st two tarsal joints white; mid tibiæ and 1st two basal joints white; anal

tuft whitish. Fore wing with erect white antemedial line; a postmedial white line slightly angled at vein 6 and oblique towards costa. Hind wing bright rufous.

Hab. Batian, Mt. Sibela, 3000′ (*Doherty*), 1 ♀ type. *Exp.* 20 millim.

*252 *c.* Ctenosia infuscata.

Ctenosia infuscata, Lower, P. Linn. Soc. N.S.W. xxvi. p. 329 (1902).

Antennæ of male ciliated; fore wing with vein 10 from before 7.

♂. Head and thorax pale ochreous brown; abdomen fuscous grey. Fore wing pale ochreous brown with a postmedial series of

Fig. 101.—*Ctenosia infuscata*, ♂. ½.

diffused fuscous streaks on the veins. Hind wing fuscous grey, the terminal half darker fuscous.

Hab. N.S. Wales, Broken Hill, type † ♂ in Coll. Lower. *Exp.* 26 millim.

Genus **LOBILEMA**.

Lobilema, Auriv. Sjost. Kilimanjaro-Meru Exp. ii. 9, p. 25 (1910) ..... Type. *conspersa*.

Proboscis fully developed; palpi short, porrect, rather broadly fringed with hair; frons smooth; antennæ of male bipectinate with rather long branches to near apex. Fore wing rather narrow; male with very large costal lobe from near base to towards apex, folded over on upperside and covering rough androconia; vein 2 from middle of cell, oblique; 3, 4 on a long stalk; 5 absent; 6 from upper angle; 7, 8 and 10 stalked, 9 absent; 11 oblique from towards end of cell. Hind wing with vein 2 from middle of cell; 3, 4 stalked; 5 absent; 6, 7 stalked; 8 from towards middle of cell.

In key differs from *Pelosia* in the fore wing having vein 10 stalked with 7, 8 and 11 free.

*252 *d.* Lobilema conspersa.

Lobilema conspersa, Auriv. Sjost. Kilimanjaro-Meru Exp. ii. 9, p. 25, pl. 1. f. 13.

♂. Head, thorax, and abdomen fulvous yellow; antennæ, palpi, tibiæ, and tarsi tinged with fuscous. Fore wing fulvous yellow sparsely irrorated with large fuscous scales; a faint diffused oblique

dark line from lower angle of cell to inner margin. Hind wing yellow.

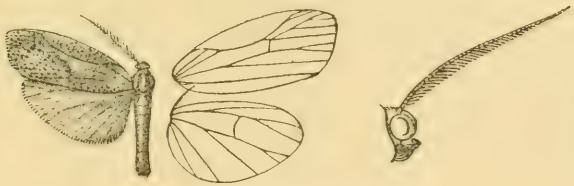

Fig. 102.—*Lobilema conspersa*, ♂. ½.

Hab. Germ. E. Africa, Kilima'njaro, Kibonota (*Sjostedt*), type † ♂ in Mus. Stockholm. *Exp.* 40 millim.

253 *a*. **Ilema melanosticta.** (Plate XXVI. fig. 22.)

Ilema melanosticta, Beth.-Baker, A. M. N. H. (8) vii. p. 534 (1911).

Head, tegulæ, and prothorax yellow, the hinder part of thorax white; palpi brown at tips; antennæ brownish; tibiæ and tarsi brown in front; abdomen yellow. Fore wing white; the costal edge black towards base; a black spot below costa above end of cell and a medial spot in submedian fold. Hind wing white. Underside of fore wing and costa of hind wing tinged with brown.

Hab. Gold Coast, Bibianaha (*Spurrell*), 1 ♀; N. Angola, N'Dalla Tando (*Ansorge*), type † ♂ in Coll. Bethune-Baker. *Exp.* ♂ 38, ♀ 48 millim.

*253 *b*. **Ilema rufofasciata.**

Ilema rufofasciata, Roths. Nov. Zool. xix. p. 219 (1912).

Antennæ of male bipectinate with moderate branches ending in bristles; fore wing with patch of rufous androconia on underside

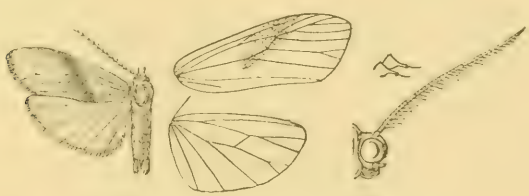

Fig. 103.—*Ilema rufofasciata*, ♂. ½.

on medial area from costa to submedian fold, vein 6 from angle of cell, 7, 8, 9 stalked, 10 from cell, 11 anastomosing with 12.

♂. Head and thorax pale yellow tinged with rufous; abdomen whitish; pectus, legs, and ventral surface of abdomen orange-yellow. Fore wing pale yellow tinged with rufous; a rather diffused inwardly oblique bright rufous medial line with some red-brown irroration beyond it. Hind wing pale yellow. Underside of fore wing with medial patch of rufous androconia from costa to submedian fold.

Hab. Br. E. Africa, Escarpment (*Doherty*), type † ♂ in Coll. Rothschild. *Exp.* 36 millim.

254 *a*. Ilema barbata.

Ilema barbata, Hmpsn. A. M. N. H. (7) xix. p. 230 (1907).

Antennæ of male serrate with fascicles of long cilia; fore wing with the cell clothed with long downturned scales on upperside, narrow, veins 3, 4 curved downwards, the discocellulars oblique.

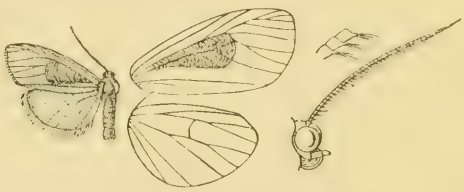

Fig. 104.—*Ilema barbata*, ♂. $\frac{3}{2}$.

♂. Head and thorax orange; antennæ tinged with fuscous; abdomen greyish yellow. Fore wing orange-yellow, the large downturned scales in cell rather deeper orange; a small brownish spot on costa above end of cell. Hind wing pale yellow.

Hab. Philippines, Luzon, Benquet Prov., Irisan (*McGregor*), 1 ♂ type. *Exp.* 20 millim.

255. **Ilema fasciculosa**, insert (syn.) :—

Nishada testacea, Roths. Nov. Zool. xix. p. 217 (1912).

Malay Peninsula, Padang Rengas, type † ♂ in Coll. Rothschild.

*255 *a*. Ilema griseoflava. (Plate XXVI. fig. 23.)

Nishada griseoflava, Roths. Nov. Zool. xix. p. 217 (1912).

♂. Head and thorax orange-yellow; palpi, frons, antennæ, and fore legs fuscous brown, the mid tibiæ in front and the mid and hind tarsi suffused with fuscous; abdomen orange-yellow, the

dorsum whitish towards base. Fore wing uniform orange-yellow. Hind wing rather paler except the hair on inner area.

Hab. Philippines, Manila (*Whitehead*), type † ♂ in Coll. Rothschild. *Exp.* 32 millim.

257. Ilema tumida.

Larva. Piepers, Tijd. v. Ent. xlvii. p. 143.

Entirely black, clothed with short hair. Food-plant, *Musœus*.

259 *a*. Ilema tricolor. (Plate XXVI. fig. 24.)

Ilema tricolor, Wileman, Entom. xliv. p. 109 (1911).

♂. Head, thorax, and abdomen ochreous tinged with grey-brown; legs grey-brown; ventral surface of abdomen ochreous white, the extremity grey-brown. Fore wing ochreous suffused with red-brown, the terminal third of wing purplish black with a faint diffused dark postmedial line. Hind wing ochreous white with rather broad fuscous terminal band with irregular inner edge.

Hab. Formosa, Rantaizan (*Wileman*), 1 ♂. *Exp.* 30 millim. Type † ♂ in Coll. Wileman.

*260 *a*. Ilema aurantiotestacea. (Plate XXVI. fig. 25.)

Ilema aurantiotestacea, Roths. Nov. Zool. xix. p. 220 (1912).

♂. Head and tegulæ ochreous; palpi, sides of frons, and antennæ black; thorax black with some ochreous hair on outer edge of patagia; pectus and legs black-brown, the fore tibiæ at extremities and tarsi ringed with ochreous; abdomen black-brown with the two basal segments ochreous. Fore wing ochreous with a large quadrate black patch on medial area extending from below the costa to inner margin, its outer edge somewhat curved and irregular; the termen slightly tinged with fuscous except at apex. Hind wing ochreous with a faint fulvous tinge. Underside of fore wing suffused with fuscous except the costal area, the basal half of inner area, and the cilia which are fuscous at base towards tornus.

Hab. Amboina (*Doherty*), type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

262 *a*. Ilema curviplaga. (Plate XXVI. fig. 26.)

Ilema curviplaga, Roths. Nov. Zool. xix. p. 220 (1912).

♀. Head and tegulæ ochreous whitish; palpi, lower part of frons and antennæ, except towards base, tinged with fuscous; patagia ochreous whitish with black patch on upper edge; dorsum of thorax black; pectus and legs ochreous tinged with fuscous except the fore legs in front; abdomen whitish suffused with brown,

the anal tuft ochreous. Fore wing ochreous whitish suffused with reddish brown except the basal half of costal area ; a curved black medial band from below costa to inner margin, rather dilated above and with its outer edge slightly excurved at discal and submedian folds ; a faint brown postmedial shade excurved below costa and with slight blackish spot on its outer edge at fork of veins 3, 4. Hind wing ochreous suffused with reddish brown, the cilia paler. Underside of fore wing suffused with fuscous brown except the terminal half of costa.

Hab. Malay Peninsula, Gunong Ijau, type † ♀ in Coll. Rothschild ; Perak, Larut Hills (*Flower*), 1 ♀. *Exp.* 32 millim.

*263 *a*. Ilema dinava.

Ilema dinawa, Beth.-Baker, Nov. Zool. xi. p. 419, pl. v. f. 15 (1904).

♀. Head and thorax reddish brown, whitish in front ; abdomen brown, whitish at base, yellowish below. Fore wing reddish brown with whitish suffusion at base, on costal half to near termen except the costa itself beyond middle, on postmedial area extending nearly to inner margin ; a short black streak on costa before middle ; the inner margin streaked with black from near base to beyond middle ; a black point in end of cell and traces of a diffused dark line from it to inner margin ; traces of a diffused postmedial line ; some fuscous suffusion on termen. Hind wing pale yellow.

Hab. Br. N. Guinea, Dinawa, 4000′ (*Pratt*), type † ♀ in Coll. Bethune-Baker. *Exp.* 36 millim.

*263 *b*. Ilema violitincta. (Plate XXVI. fig. 27.)

Ilema violitincta, Roths. Nov. Zool. xix. p. 220 (1912).

♂. Head whitish ; palpi and antennæ brown ; thorax purple-brown, the outer edge of patagia whitish ; legs black-brown, the fore tibiæ and the tarsi ringed with whitish ; abdomen with the basal half grey tinged with yellow, the terminal half black. Fore wing red-brown suffused with purple ; the basal half of costal area and fringe of scales in cell whitish with an antemedial black streak on costa and oblique medial black spot from costa ; a dark subterminal shade, the area beyond it paler, rather darker again at termen. Hind wing ochreous yellow. Underside of fore wing brown, the costal area yellowish towards base and apex ; hind wing with a brownish shade on costa beyond middle.

♀. Thorax and abdomen dark brown, the latter paler at base ; fore wing without the whitish on basal half of costal area ; the inner area deep chocolate-brown from near base, where it extends to below costa, to the subterminal shade, a slight antemedial black streak on costa and discoidal point ; hind wing suffused with brown, the base and termen rather paler.

Hab. Sumbawa, Tambora (*Doherty*), type † ♂, ♀ in Coll. Rothschild. *Exp.* 26–28 millim.

* 263 *c*. Ilema lutescens. (Plate XXVI. fig. 28.)

Ilema lutescens, Roths. Nov. Zool. xix. p. 220 (1912).

♀. Head and thorax ochreous whitish, the dorsum of thorax with some black-brown; pectus and legs tinged with fuscous; abdomen ochreous whitish, the terminal segments black-brown. Fore wing ochreous whitish slightly irrorated with red-brown except on costal area, the terminal area rather more strongly irrorated; an antemedial black streak on costa and rather triangular black spot in end of cell. Hind wing ochreous yellow. Underside of fore wing suffused with fuscous brown except the base and costa to beyond middle.

Hab. Sula Besi (*Doherty*), type † ♀ in Coll. Rothschild. *Exp.* 24 millim.

*271 *a*. Ilema chasiana. (Plate XXVI. fig. 29.)

Scoliacma khasiana, Roths. Nov. Zool. xix. p. 215 (1912).

♂. Head, tegulæ, and shoulders yellowish white; palpi, frons, antennæ, and thorax fuscous brown; pectus and legs whitish suffused with brown; abdomen grey-brown, the ventral surface whitish. Fore wing yellowish white tinged with brown; the basal half of costal edge brown; the antemedial area suffused with brown below the cell; the fringe of scales in cell silvery whitish; a diffused oblique postmedial brown band; some brown suffusion on costa towards apex and a large patch on middle of subterminal area from end of cell to near termen. Hind wing whitish strongly suffused with brown, the termen and cilia whiter. Underside of fore wing suffused with dark brown, the termen whitish.

Hab. Assam, Khásis, type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

278 *a*. Ilema contorta.

Ilema contorta, Fryer, Trans. Linn. Soc., Zool. xv. p. 4, pl. 1. f. 1 (1912).

Fore wing of male with very large fold in and beyond the cell, its lower edge sinuous on upperside and extending at middle to vein 1, on underside extending to just below the costa.

Fig. 105.—*Ilema contorta*, ♂. ½.

♂. Head and tegulæ yellow tinged with brown; antennæ and palpi fuscous; thorax fuscous brown, the outer edge of patagia yellowish; pectus and legs yellow, the fore tibiæ and tarsi fuscous; abdomen yellow, dorsally tinged with brown. Fore wing pale

ochreous brown, the costal area yellower except towards base. Hind wing pale yellow. Underside of fore wing brownish ochreous.

♀. Fore wing with the costal area yellow to base.

Hab. Seychelles, Mahé (*Fryer*), 3 ♂, 4 ♀ type. *Exp.* 30 millim.

282 *a*. **Ilema pilosa**, n. sp.

Fore wing of male clothed with rough scales above, with costal fold on upperside, and slight ridges of rough scales in and below base of cell.

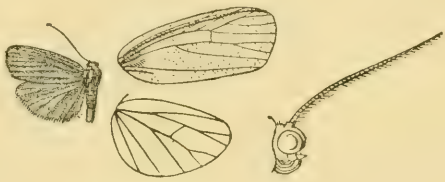

Fig. 106.—*Ilema pilosa*, ♂. ¾.

♂. Head and thorax rufous tinged with brown; abdomen grey-brown, the anal segment and ventral tuft yellow. Fore wing rufous. Hind wing yellowish tinged with rufous.

♀. Thorax browner; abdomen wholly grey-brown; fore wing yellowish suffused with reddish brown; hind wing pale yellow.

Hab. Gold Coast, Bibianaha (*Spurrell*), 1 ♂, 2 ♀ type. *Exp.* 24 millim.

283. **Ilema oblitterans.**

Larva. Piepers, Tijd. v. Ent. xlvii. p. 143.

Very pale grey, the dorsal area slightly darker; dorsal line deep yellow, interrupted at 1st abdominal somite; hair very long, black, forming lateral pencils on 1st somite.

284. **Ilema depressa**, insert:—

Lithosia deplana, ab. *unicolor*, Banks, Ent. Mo. Mag. (2) xiv. p. 56 (1903),

Fore wing uniform deep orange-buff without any grey tinge; hind wing pale orange-buff tinged with grey especially towards inner margin, the cilia orange-buff.

285 *a*. **Ilema arizana**. (Plate XXVI. fig. 30.)

Ilema arizana, Wileman, Entom. xliii. p. 221 (1910).

♂. Head, thorax, and abdomen chalky white, the tegulæ and extremity of abdomen slightly tinged with yellow; palpi black

at tips; antennæ brownish; pectus, legs, and ventral surface of abdomen ochreous white. Wings uniform chalky white. Underside of fore wing suffused with brown.

♀. Nearly pure white.

Hab. Formosa, Arizan (*Wileman*), 3 ♀. *Exp.* 40 millim. Type † ♂, ♀ in Coll. Wileman.

*285 *b*. Ilema pulverosa. (Plate XLI. fig. 37.)

Eilema pulverosa, Auriv. Ark. f. Zool. ii. 4, p. 34 (1904).

Fore wing of male entirely clothed on upper side with rough hairy scales.

♂. Head and thorax orange tinged with brown; pectus and legs brownish; abdomen brown, the extremity and ventral surface yellow. Fore wing fulvous orange, the apical area slightly paler. Hind wing pale orange-yellow. Underside of fore wing with fuscous suffusion on basal area except at costa.

Hab. W. Africa, Cameroons, type † ♂ in Mus. Stockholm. *Exp.* 22 millim.

*285 *c*. Ilema triplaiola.

Ilema triplaiola, Beth.-Baker, A. M. N. H. (8) vii. p. 535 (1911).
Ilema malanga, Beth.-Baker, A. M. N. H. (8) vii. p. 535 (1911).
Ilema unistrigata, Beth.-Baker, A. M. N. H. (8) vii. p. 535 (1911).
Ilema bisticta, Beth.-Baker, A. M. N. H. (8) vii. p. 566 (1911).

Fore wing of male with the medial area obliquely clothed with rough androconia.

♂. Head and thorax fulvous yellow; tibiæ and tarsi brown in front; abdomen fulvous yellow, greyish towards base of dorsum.

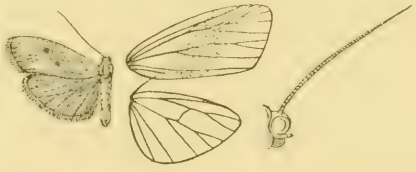

Fig. 107.—*Ilema triplaiola*, ♂. ½.

Fore wing fulvous yellow, the androconia on medial area more rufous; a blackish discoidal spot and medial spot in submedian fold with traces of a line from below costa to the upper spot and from the lower spot to inner margin. Hind wing pale yellow; the underside with the costal area tinged with rufous.

♀. Fore wing yellower with faint rufous tinge; the medial line fuscous, entire from costa to inner margin, oblique between the two spots.

Hab. N. Angola, N'Dalla Tando (*Ansorge*), type † ♂, Malange, type † ♂ *malanga* and † ♀ *bisticta*, Gunnal, type † ♀ *unistrigata*, in Coll. Bethune-Baker. *Exp.* ♂ 26, ♀ 28 millim.

289 *a*. Ilema punctilineata. (Plate XXVI. fig. 31.)

Ilema punctilineata, Hmpsn. A. M. N. H. (7) viii. p. 180 (1901).

Head and thorax pale red-brown; abdomen pale ochreous, the extremity and ventral surface tinged with rufous. Fore wing red-brown; the basal and terminal areas with darker irroration; an indistinct dark medial line slightly angled at discocellulars, then oblique and with black points on it in end of cell and submedian fold. Hind wing pale ochreous yellow.

Ab. 1. Fore wing with the black points obsolete.

Fore wing with vein 6 shortly stalked with 7, 8, 9, or from cell; 11 anastomosing with 12.

Hab. Br. E. Africa, Masailand, E. Quaso (*Betton*), 3 ♀, Uganda Ry., Mile 478 (*Betton*), 2 ♂, 3 ♀ type, El Burgon (*Betton*), 1 ♀. *Exp.* 38–40 millim.

*289 *b*. Ilema bipartita. (Plate XXVI. fig. 32.)

Eilema bipartita, Auriv. Sjost. Kilimanjaro-Meru Exp. ii. 9, p. 27, pl. 1. f. 12 *a* (1910).

♀. Head and thorax whitish suffused with red-brown; abdomen ochreous white, the ventral surface tinged with red-brown. Fore wing whitish suffused with red-brown and slightly irrorated with dark brown; an inwardly oblique rather diffused fuscous line from costa just beyond middle to middle of inner margin. Hind wing yellowish white.

Hab. Germ. E. Africa, Kilima'njaro, Obstgarten-Steppe (*Sjostedt*), type ♀ in Mus. Stockholm. *Exp.* 26 millim.

*290 *a*. Ilema cramboides.

Ilema cramboides, Kenrick, Trans. Ent. Soc. 1913, p. 601, pl. 31. f. 2.

♂. Head and thorax white suffused with pale red-brown and irrorated with black; antennæ red-brown except towards base; frons surrounded by black; palpi black; abdomen pale grey-brown, white at base and ochreous at extremity, the ventral surface white suffused with red-brown and with lateral and ventral series of small blackish spots. Fore wing white suffused with red-brown and irrorated with raised black scales; postmedial line faint, blackish, with small black spot at middle of costa, erect to vein 2, then strongly bent inwards to middle of inner margin. Hind wing white tinged with pale red-brown, the terminal area slightly irrorated with red-brown; cilia with some black scales except towards tornus. Underside white irrorated with raised black scales on pale red-brown striæ, the discal area of fore wing

suffused with red-brown, the cell and inner area of hind wing slightly irrorated.

Hab. Centr. Madagascar, Nalamagaotna, 2500′ (*Pratt*), type † ♂ in Coll. Kenrick. *Exp.* 38 millim.

*292 *a*. Ilema curvilinea. (Plate XXVI. fig. 33.)

Ellema curvilinea, Auriv. Voeltzkow, Reis. Ost-Afric. ii. p. 339, pl. 19. f. 11 (1909).

♀. Head and thorax white tinged with brown; tarsi fuscous at extremities; (abdomen wanting). Fore wing grey-white tinged with pale brown; a postmedial line formed by black striæ, ending on the costa and inner margin just beyond middle and bent outwards to towards termen between veins 6 and 3. (Hind wing wanting.)

Hab. Madagascar, type † ♀ in Mus. Stockholm. *Exp.* 26 millim.

*292 *b*. Ilema catenata.

Lithosia catenata, Mab. Ann. Soc. Ent. Fr. 1899, p. 726.

♂. Pale clear brownish grey; palpi blackish. Fore wing with the postmedial line ending at middle of costa and inner margin, bent outwards to near termen between veins 6 and 2, in the form of striæ interrupted at the veins. Hind wing white tinged with brown on inner and terminal areas.

Hab. Madagascar, Baie d'Antongil (*Mocquerys*), type † ♂ in Mus. Paris. *Exp.* 30 millim.

292 *c*. Ilema stictigramma. (Plate XXVI. fig. 34.)

Ilema stictigramma, Hmpsn. A. M. N. H. (8) i. p. 475 (1908).

♂. Head and thorax very pale red-brown; abdomen whitish tinged with red-brown, the extremity ochreous. Fore wing very pale red-brown; a small postmedial blackish spot on costa and oblique postmedial series of four spots from vein 6 well beyond the cell to inner margin. Hind wing pale ochreous. Underside of fore wing and costal area of hind wing pale red-brown.

Hab. Comoro Is., Mayotta (*Meade-Waldo*), 1 ♂ type. *Exp.* 22 millim.

293. Ilema notifera, insert (syn.) :—

Lithosia umbrigera, Mab. Ann. Soc. Ent. Fr. 1899, p. 726.

Madagascar, Baie d'Antongil (*Mocquerys*), type † ♂ in Mus. Paris.

*293 *a*. Ilema inconspicualis.

Ilema inconspicualis, Kenrick, Trans. Ent. Soc. 1913, p. 602, pl. 31. f. 6.

♀. Head and thorax white tinged with pale red-brown, the vertex of head with small black spot, the tegulæ, pro- meso- and metathorax with paired black points, the patagia with a few black

scales; antennæ brown; frons, palpi, and legs brown, the palpi black at tips; abdomen grey-brown, the extremity and ventral surface brown. Fore wing white slightly striated with brown and prominently irrorated with large raised black scales, the costal area tinged with brown, the postmedial line represented by a minute black spot above vein 5 towards termen; cilia tinged with red-brown. Hind wing white tinged with brown, the apical area suffused with brown. Underside of fore wing and costal half of hind wing pale red-brown.

Hab. Centr. Madagascar, Nalamagaotna, 2500′ (*Pratt*), type † ♀ in Coll. Kenrick. *Exp.* 36 millim.

*293 *b*. Ilema humilis.

Ilema humilis, Kenrick, Trans Ent. Soc. 1913, p. 602, pl. 31. f. 7.

♂. Head and thorax pale red-brown; pectus, legs, and abdomen white slightly tinged with brown. Fore wing pale red-brown; a faint brown spot in discal fold beyond the cell and medial spots above vein 1 and on inner margin. Hind wing white with a very faint brown tinge; the underside with the costal area rather more strongly tinged with red-brown.

Hab. Centr. Madagascar, Nalamagaotna, 2500′ (*Pratt*), type † ♂ in Coll. Kenrick. *Exp.* 30 millim.

293 *c*. Ilema peperita. (Plate XXVI. fig. 35.)

Ilema peperita, Hmpsn. A. M. N. H. (7) viii. p. 181 (1901).
Eilema montana, Auriv. Sjost. Kilimanjaro-Meru Exp. ii. 9, p. 27, pl. 1. fig. 12 (1910).

Head and thorax grey tinged with brown and irrorated with black; abdomen brownish grey. Fore wing brownish grey strongly irrorated with black; a very indistinct postmedial line excurved from below costa to vein 6, then very oblique and with a black point on it in submedian fold and obscure spot on inner margin. Hind wing brownish white slightly irrorated with fuscous. Fore wing with vein 6 from below angle of cell; 7, 8, 9 stalked; 11 anastomosing with 12.

Ab. 1. *montana*. Fore wing with the postmedial line more strongly marked especially towards costa.

Hab. Br. E. Africa, Nairobi (*Anderson*), 1 ♂, Uganda Ry., Mile 478 (*Betton*), 1 ♀ type, Nakuro (*Betton*), 1 ♀; Germ. E. Africa, Kilima'njaro, Kiboscho (*Sjostedt*), type † ♀ *montana* in Mus. Stockholm. *Exp.* 34 millim.

296 *a*. Ilema rubrescens. (Plate XXVI. fig. 36.)

Ilema rubrescens, Hmpsn. A. M. N. H. (8) iv. p. 353 (1909).

♀. Head and thorax pale red-brown with a yellowish tinge; abdomen grey tinged with rufous. Fore wing pale red-brown with

a yellowish tinge; an indistinct fuscous postmedial line oblique from costa to vein 4, then inwardly oblique. Hind wing whitish faintly tinged with red-brown.

Hab. Formosa, Kagi Distr., 1 ♀ type. *Exp.* 40 millim.

296 *b*. **Ilema rufitincta**, n. sp. (Plate XXVII. fig. 1.)

♀. Head and thorax whitish tinged with rufous; abdomen grey-white. Fore wing whitish tinged with rufous; a faint diffused rufous postmedial line, almost obsolete on costal half, angled outwards beyond the cell, then oblique. Hind wing yellowish white.

Fore wing with veins 6, 7, 8, 9 stalked; 11 anastomosing with 12.

Hab. Uganda, Toro, Mbarara Fort (*Neave*), 1 ♀ type. *Exp.* 40 millim.

297 *a*. **Ilema fuscicorpus**, n. sp. (Plate XXVII. fig. 2.)

♂. Head and thorax yellow, the latter suffused with brown except at base of tegulæ; palpi and frons black; pectus and legs black, the mid and hind coxæ yellow; abdomen grey suffused with fuscous, the anal segment yellow, the ventral surface blackish. Fore wing reddish yellow suffused with fuscous brown; a broad blackish postmedial line, oblique to beyond the cell where it is strongly angled outwards, then incurved. Hind wing yellowish white; the underside with the costa tinged with brown.

♀. Abdomen wholly blackish.

Fore wing with veins 7, 8, 9 stalked; 11 anastomosing with 12.

Hab. Gold Coast, Bibianaha (*Spurrell*), 2 ♂, 1 ♀ type, Kumasi (*Sanders*), 1 ♀. *Exp.* ♂ 32, ♀ 38 millim.

297 *b*. **Ilema melasonea**. (Plate XXVII. fig. 3.)

Ilema melasonea, Hmpsn. A. M. N. H. (7) xi. p. 343 (1903).

Head pale orange-yellow; palpi black at tips; thorax greyish fuscous with ochreous spot on metathorax; legs streaked with ochreous; abdomen grey, the anal tuft and ventral surface ochreous. Fore wing brownish grey; the costal area whitish to beyond the postmedial band, the costal edge ochreous; the postmedial band black, somewhat diffused, oblique from costa to discal fold where it is angled, then incurved, somewhat narrower and expanding in submedian fold. Hind wing pale yellow.

Fore wing with veins 3, 4 stalked, 6 from upper angle; 7, 8, 9 stalked; 11 anastomosing with 12.

Hab. Br. E. Africa, Lagari (*Betton*), 1 ♀ type, Aberdare Mts. (*Neave*), 1 ♂. *Exp.* 36 millim.

*298 *a*. **Ilema cribroides**.

Ilema cribroides, Kenrick, Trans. Ent. Soc. 1913, p. 601, pl. 31. f. 3.

♂. Head and thorax white, the basal joint of antennæ and vertex

of head with black spots, the sides of frons and palpi black; tegulæ and patagia tinged with grey, the pro- and metathorax with black spots; antennæ brownish; fore legs black on inner side, the tarsi black at extremities; abdomen fuscous brown, the extreme base and ventral surface white; the anal tuft brownish white. Fore wing white with a faint brownish tinge on inner area; a short black streak at base of costa, short subbasal streak below the cell, streak in middle of cell and longer streak in end of cell; a series of ten black spots arising at middle of costa and ending at middle of inner margin, excurved beyond the cell to near termen. Hind wing whitish suffused with brown; cilia white. Underside of fore wing white suffused with brown; hind wing white.

Hab. CENTR. MADAGASCAR, Nalamagaotna, 2500′ (*Pratt*), type † ♂ in Coll. Kenrich. *Exp.* 40 millim.

301 *a*. **Ilema nigrociliata**. (Plate XXVII. fig. 4.)

Eilema nigrociliata, Auriv. Voeltskow, Reis. Ost-Afric. ii. p. 340, pl. 19. f. 13 (1909).

♀. Head, thorax, and abdomen orange; palpi at tips and antennæ except at base black; fore tibiæ and tarsi, the mid and hind tibiæ at base and extremities and the tarsi above black. Fore wing orange; medial black spots below costa, in submedian fold, and above inner margin, and a postmedial spot in discal fold; cilia fuscous. Hind wing orange; the terminal area black from apex to vein 4, then the termen narrowly and cilia black.

Hab. S.W. MADAGASCAR, Andranohinaly (*Voeltskow*), type † ♀ in Mus. Stockholm. *Exp.* 28 millim.

*301 *b*. **Ilema inornata**.

Ilema inornata, Kenrick, Trans. Ent. Soc. 1913, p. 601, pl. 31. f. 4.

♀. Head and thorax fiery orange; antennæ blackish; palpi black at tips; fore and mid tibiæ and tarsi blue-black, the hind tibiæ at base and extremity and the tarsi except towards base blue-black; abdomen orange-yellow, the basal half of dorsum grey. Fore wing orange-yellow; a small blue-black spot below origin of vein 2 with oblique bar beyond it on inner area; small blue-black spots at middle of costa and in discal fold beyond the cell. Hind wing yellow. Underside of fore wing and costal area of hind wing orange-yellow.

Hab. CENTR. MADAGASCAR, Nalamagaotna, 2500′ (*Pratt*), type † ♀ in Coll. Kenrick. *Exp.* 36 millim.

301 *c*. **Ilema pentaspila**. (Plate XXVII. fig. 5.)

Ilema pentaspila, Hmpsn. A. M. N. H. (7) xix. p. 231 (1907).

♀. Head, thorax, and abdomen ochreous; fore tibiæ and tarsi

suffused with fuscous. Fore wing ochreous; a postmedial somewhat oblique series of five small black spots, below costa, in end of cell, a spot below veins 3, 4 displaced outwards, a short streak-like spot in submedian fold and a spot above inner margin. Hind wing pale ochreous.

Hab. Singapore (*Ridley*), 1 ♀ type; Borneo, Kuching (*Shelford*), 3 ♀. *Exp.* 26–30 millim.

303 *a*. **Ilema jacobsi**, n. sp. (Plate XXVII. fig. 6.)

Ilema apicalis, Hmpsn. Cat. Lep. Phal. B.M. ii. p. 159 (♀ nec ♂).

Head, thorax, and abdomen brownish grey; fore femora and tibiæ above, the mid and hind femora and tibiæ at extremities and the tarsi blackish; anal tuft tinged with rufous. Fore wing brownish grey; small postmedial black spots on costa and in discal and submedian folds. Hind wing pale yellow.

Hab. Morocco, Tangier (*Jacobs*), 1 ♀; Gold Coast, Accra (*Sir G. Carter*), 1 ♀; S. Nigeria, Old Calabar (*Sampson*), 1 ♂ type. *Exp.* 30–32 millim.

304. **Ilema eningæ**, insert:—

Var. *pia*, Strand, Arch. Naturg. lxxviii. 9, p. 99 (1912).

304 *a*. **Ilema diplisticta**. (Plate XXVII. fig. 7.)

Ilema diplisticta, Beth.-Baker, A. M. N. H. (8) vii. p. 535 (1911).

♀. Head, tegulæ, patagia, and prothorax fulvous yellow, the hinder part of thorax pale brown; palpi at tips and antennæ brownish; pectus and legs fulvous yellow tinged with brown; abdomen fulvous yellow tinged with grey-brown. Fore wing pale grey-brown; a black spot below costa above end of cell and a spot below end of cell in submedian fold. Hind wing whitish tinged with brown.

♂. Fore wing with postmedial triangular black spot on costa.

Hab. Cameroons, Bitja, Ja R., 1 ♂; N. Angola, N' Dalla Tando (*Ansorge*), type † ♀ in Coll. Bethune-Baker. *Exp.* 34 millim.

304 *b*. **Ilema mesosticta**. (Plate XXVII. fig. 8.)

Ilema mesosticta, Hmpsn. A. M. N. H. (8) viii. p. 401 (1911).

♀. Head and thorax ochreous brown; abdomen ochreous brown dorsally tinged with fuscous. Fore wing ochreous brown; a black spot in upper extremity of cell with another below it in submedian fold. Hind wing pale ochreous brown with the terminal area to vein 2 darker; the underside pale brownish grey, the costal area and terminal area to vein 2 more ochreous brown.

Fore wing with vein 6 from below angle of cell; 11 anastomosing with 12.

Hab. S. NIGERIA, Ilesha (*Humfrey*), 1 ♀ type. *Exp.* 26 millim.

304 *c*. **Ilema distigmata.** (Plate XXVII. fig. 9.)

Ilema distigmata, Hmpsn. A. M. N. H. (7) viii. p. 181 (1901).

♀. Ochreous yellow; fore legs with the extremity of femora and the tibia above fuscous. Fore wing with black spot in end of cell and another rather nearer base in submedian fold. Hind wing paler.

The W. African specimen is shorter winged than the one from E. Africa.

Fore wing with vein 6 shortly stalked with 7, 8, 9; 11 anastomosing with 12.

Hab. S. NIGERIA, Old Calabar (*Sampson*), 1 ♀ type; BR. E. AFRICA, Kikuyu, Nairobi Plains (*Betton*), 1 ♀. *Exp.* 32–38 millim.

306 *a*. **Ilema similipuncta**, n. sp. (Plate XXVII. fig. 10.)

♀. Head and tegulæ yellow; antennæ except at base and 3rd joint of palpi fuscous; thorax leaden grey; fore coxæ and femora behind and mid and hind coxæ in front yellowish; abdomen grey, the base yellow, the extremity orange. Fore wing leaden grey, the costal area yellow, narrowing to apex; a small postmedial black spot below costa and point in submedian fold; cilia pale yellow. Hind wing yellow.

Hab. MASHONALAND (*Dobbie*), 1 ♀ type. *Exp.* 42 millim.

*306 *b*. **Ilema costimacula.** (Plate XXVII. fig. 11.)

Eilema costimacula, Auriv. Sjost. Kilimanjaro-Meru Exp. ii. 9, p. 27, pl. 1. f. 12 *c* (1910).

♀. Head and thorax whitish suffused with red-brown; fore tibiæ and tarsi black; abdomen ochreous yellow. Fore wing whitish tinged with pale red-brown; a rather diffused black spot at middle of costa and slight spot in submedian fold rather nearer the base with some dark scales between it and inner margin. Hind wing pale yellow.

Hab. GERM. E. AFRICA, Kilima'njaro, Kibonoto (*Sjostedt*), type † ♀ in Mus. Stockholm. *Exp.* 34 millim.

*308 *a*. **Ilema cirrochroa.**

Lithosia cirrochroa, Mab. Ann. Soc. Ent. Fr. 1899, p. 726.

♀. Grey-brown; palpi and tibiæ and tarsi above blackish. Fore wing rather sparsely irrorated with black scales; a black spot on

costa just beyond middle. Hind wing whitish tinged with brown especially on apical area.

Hab. Madagascar, Baie d'Antongil (*Mocquerys*), type † ♀ in Mus. Paris. *Exp.* 26 millim.

*310 *a*. Ilema pallidicosta.

Lithosia pallidicosta, Mab. Ann. Soc. Ent. Fr. 1899, p. 726.

♂. Pale brown; abdomen with a yellowish tinge at extremity and on ventral surface. Fore wing with the costal area whitish to beyond middle; a fuscous point in submedian fold below end of cell and another in discal fold beyond the cell. Hind wing yellowish. Underside of fore wing with the whole costal area pale.

Hab. Madagascar, Baie d'Antongil (*Mocquerys*), type † ♂ in Mus. Paris. *Exp.* 26 millim.

310 *b*. Ilema creatoplaga. (Plate XXVII. fig. 12.)

Ilema creatoplaga, Hmpsn. A. M. N. H. (7) viii. p. 181 (1901).

♂. Head and thorax red-brown; palpi, frons, and tibiæ tinged with fuscous; abdomen grey, the hair on sides and the anal tufts fulvous. Fore wing red-brown tinged with fuscous except on inner area and a postmedial patch on costal area; a pale yellow-brown oblong patch occupying the terminal half of cell and extending to submedian fold. Hind wing pale brownish ochreous.

Fore wing with vein 6 from below angle of cell, 7, 8, 9 stalked, 11 slightly anastomosing with 12.

Hab. Br. E. Africa, Uganda Ry., El Burgon, Mile 178 (*Betton*), 3 ♂ type. *Exp.* 38 millim.

*311 *a*. Ilema funeralis.

Ilema funeralis, Kenrick, Trans. Ent. Soc. 1913, p. 601, pl. 31. f. 5.

♂. Head and thorax bright crimson; antennæ and palpi at tips black; legs black suffused with metallic blue; abdomen black, the sides, anal tuft and ventral surface crimson. Fore wing bright crimson; a black point at base of costa; the terminal area broadly blue-black, its inner edge excurved to vein 3, then oblique to middle of inner margin. Hind wing rather paler crimson, the terminal area broadly fuscous black.

Hab. Centr. Madagascar, Nalamagaotna, 2500′ (*Pratt*), type † ♂ in Coll. Kenrick. *Exp.* 32 millim.

311. Ilema elegans, insert:—

Subsp. *restricta*, Hmpsn. P. Z. S. 1910, p. 391.

Abdomen dorsally orange; male with the terminal band of fore

wing much narrower, of hind wing hardly more than a line; female with the band of fore wing narrowing to a point at tornus; hind wing without band.

Hab. N.E. Rhodesia, E. Luangwa Distr. (*Neave*), 2 ♂, 1 ♀ type. *Exp.* ♂ 32, ♀ 38 millim.

313. **Ilema apicalis.**

Larva. Piepers, Tijd. v. Ent. xlvii. p. 144, pl. x. f. 4.

Clothed with dark grey hair with a few long black hairs; dorsal line black, interrupted near the middle by a grey patch; head yellow with two black patches. Food-plants: *Tamarindus indica*, *Eugenia*, *Muscus*, and Lichen.

314. **Ilema dorsalis**, insert (syn.):—

Ilema testacea, *louisiadensis*, Roths. Nov. Zool. xix. p. 221 (1912).

Louisiades, St. Aignan (*Meek*), type † ♂ in Coll. Rothschild.

*314*a*. **Ilema testacea.** (Plate XXVII. fig. 13.)

Ilema testacea, Roths. Nov. Zool. xix. p. 221 (1912).

♂. Head and thorax grey-brown, the tegulæ ochreous with a grey-brown band, the patagia ochreous at base; abdomen ochreous, the medial segments suffused with brown above and below. Fore wing ochreous tinged with reddish brown. Hind wing ochreous yellow.

Fore wing with minute areole, 7 from well beyond it, 11 anastomosing with 12.

Hab. Solomon Is., Treasury I. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 34 millim.

316*a*. **Ilema lamprocraspis**, n. sp. (Plate XXVII. fig. 14.)

♂. Head and thorax pale grey-brown; antennæ, palpi, and legs fuscous brown; abdomen grey, the extremity and ventral surface reddish ochreous. Fore wing pale grey-brown clothed with powdery scales, the terminal area tinged with fuscous and glossy. Hind wing pale grey-brown clothed with powdery scales, the terminal area narrowly glossy from apex to vein 2. Underside uniform pale reddish brown.

♀. Head and thorax white, the head faintly tinged with yellow, the tegulæ with slight fuscous bars; antennæ fuscous; palpi yellow, fuscous towards tips; pectus and legs ochreous tinged with brown; abdomen grey-white, the ventral surface brownish ochreous.

Fore wing uniform glossy white with a faint yellowish tinge. Hind wing ochreous white. Underside of fore wing pale reddish ochreous.

Hab. SEYCHELLES, Mahé (*Fryer*), 7 ♂, 3 ♀ type. *Exp.* 30 millim.

322 *a*. **Ilema proleuca**, n. sp. (Plate XXVII. fig. 15.)

♂. Head and tegulæ fulvous yellow; antennæ, thorax, and abdomen reddish brown tinged with grey; pectus, legs, ventral surface of abdomen, and anal tuft fulvous yellow. Fore wing grey-brown with broad whitish fascia on costal area, the costal edge brownish. Hind wing yellow. Underside of fore wing with the costal and inner areas yellow.

Hab. GOLD COAST, Aburi (*Armstrong*), 1 ♂ type. *Exp.* 24 millim.

322 *b*. **Ilema sanguicosta**. (Plate XXVII. fig. 16.)

Ilema sanguicosta, Hmpsn. A.M.N.H. (7) viii. p. 181 (1901).
Eilema sanguicosta, var. *nyassana*, Strand, Arch. Naturg. lxxviii. 7, p. 180 (1912).

♂. Head and tegulæ scarlet; palpi with the 3rd joint fuscous; antennæ ochreous, black at extremity; thorax brown with scarlet patch on metathorax; legs scarlet with brown stripes above and the tarsi brown; abdomen brown with the last two segments and ventral surface orange. Fore wing fuscous brown; the costal edge scarlet with a yellowish fascia below it expanding on apical area; cilia yellow. Hind wing pale yellow, the costal half fuscous brown leaving the termen yellow.

♀. Abdomen pale brownish instead of fuscous brown; hind wing wholly yellow.

Fore wing with vein 6 from angle of cell, 9 from 10 anastomosing with 8 to form the areole, 11 anastomosing with 12.

Hab. BR. E. AFRICA, Uganda Ry., Mile 478 (*Betton*), 2 ♂ type; GERM. E. AFRICA, L. Nyasa; MASHONALAND, Salisbury (*Marshall*), 1 ♀. *Exp.* ♂ 46, ♀ 36 millim.

*324 *a*. **Ilema taivana**. (Plate XXVII. fig. 17.)

Ilema taiwana, Wileman, Entom. xliii. p. 222 (1910).

♂. Head and tegulæ orange, the latter with fuscous brown tips; antennæ brown; thorax fuscous brown; pectus and legs brown; abdomen grey-brown. Fore wing fuscous brown; the costal edge orange, black towards base, with a creamy white fascia below it. Hind wing pale brown, the inner half whitish brown.

Hab. FORMOSA, Rantaizan (*Wileman*), type † ♂ in Coll. Wileman. *Exp.* 34 millim.

324 *b*. Ilema heterogyna.

Ilema heterogyna, Hmpsn. P. Z. S. 1910, p. 392, pl. xxxvi. f. 6.

♂. Head and tegulæ orange-yellow; thorax fuscous brown with a greyish tinge; pectus and legs yellow, the fore and mid tibiæ and tarsi, the hind tibiæ at extremity and tarsi towards extremity black above; abdomen orange-yellow, dorsally blackish on basal half. Fore wing fuscous grey, the costal area yellow, narrowing to a point at apex. Hind wing fuscous brown with some orange suffusion on disc and inner area; cilia yellow; the underside orange-yellow, the termen suffused with fuscous except at apex and towards tornus, some fuscous irroration in cell and below costa.

♀. Fore wing paler, the cilia yellow; hind wing yellow.

Hab. N.E. Rhodesia, Serenji Distr. (*Neave*), 1 ♂, 1 ♀ type. *Exp.* ♂ 30, ♀ 32 millim.

325. Ilema flavibasis, insert (syn.):—

Ilema nitens, Roths. Nov. Zool. xix. p. 221 (1912).

♀. Metathorax with orange patch; hind wing with the orange extending to beyond the cell.

Hab. Br. E. Africa, Wasin, type † ♀ in Coll. Rothschild.

*330 *a*. Ilema eceicei.

Ilema ekeikei, Beth.-Baker, Nov. Zool. xi. p. 419, pl. v. f. 16 (1904).
Ilema perplexa, Roths. Nov. Zool. xix. p. 219 (1912).
Ilema germana, Roths. Nov. Zool. xix. p. 219 (1912).

Head, tegulæ, and base of patagia orange-yellow, the rest of thorax black-brown with a leaden gloss; antennæ black; palpi black above at tips; tibiæ and tarsi black above; abdomen brownish white, the extremity and ventral surface orange-yellow. Fore wing brown with a leaden-grey gloss; the base yellow; a rather broad yellow costal fascia of even width throughout; the termen and cilia yellow. Hind wing pale yellow.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♀ *germana* in Coll. Rothschild; Br. N. Guinea, Ekeikei (*Pratt*), type † ♂ in Coll. Bethune-Baker; German N. Guinea, Astrolabe Bay (*Wahnes*), type † ♀ *perplexa* in Coll. Rothschild. *Exp.* 38 millim.

333. Ilema vicaria.

Larva. Piepers, Tijd. v. Ent. xlvii. p. 145.

Clothed with blackish or grey-brown hair and a few long black hairs; dorsal line black defined on each side by reddish or yellowish marblings; thoracic somites with transverse dorsal black lines. Food-plant, *Citrus*.

335. **Ilema gracillipennis**, insert (syn.) :—

Onychipoda elongata, Roths. Nov. Zool. xix. p. 230 (1912).

Br. E. Africa, Nairobi (*Jackson*), type † ♂ in Coll. Rothschild.

*336. **Ilema debilis.** (Plate XXVII. fig. 19.)

Siberia, Lake Baikal in Coll. Püngeler.

339. **Ilema harpophora**, insert (syn.) :—

Ilema costistrigata, Beth.-Baker, Nov. Zool. xi. p. 419, pl. v. f. 30 (1904).

Br. N. Guinea, Ekeikei (*Pratt*), type † ♂ in Coll. Bethune-Baker.

340 *a*. **Ilema phæocraspis.** (Plate XXVII. fig. 18.)

Ilema phæocraspis, Hmpsn. A. M. N. H. (7) viii. p. 182 (1901).

♀. Head and thorax pure white; palpi, frons, and antennæ brown tinged with fuscous; pectus and legs pale brown, the latter tinged with fuscous above; abdomen pale reddish brown. Fore wing pure white; the costal edge pale reddish brown, black towards base. Hind wing brownish yellow. Underside tinged with brown, some yellow-brown on costal area of both wings.

Fore wing with vein 6 from below angle of cell, 7, 8, 9 stalked, 11 anastomosing with 12.

Hab. Br. E. Africa, Kilima'njaro (*Cholmley*), 1 ♀, Uganda Ry., Mile 478 (*Betton*), 4 ♀ type, Masailand, Quaso, 1 ♀. *Exp.* 34–38 millim.

342 *a*. **Ilema fuscifrons.** (Plate XXVII. fig. 20.)

Ilema fuscifrons, Hmpsn. A. M. N. H. (7) xv. p. 433 (1905).

♂. Head, tegulæ, and shoulders orange-yellow; palpi, frons, and antennæ fuscous; thorax grey; pectus and legs yellow, the fore legs and mid tibiæ in front grey; abdomen yellow. Fore wing grey, the costa narrowly fulvous yellow, the costal edge black towards base; cilia yellowish. Hind wing yellow. Underside of fore wing as on upperside, but the basal and inner areas yellower.

Hab. Br. N. Guinea, Aroa R. (*Meek*), 1 ♂ type. *Exp.* 32 millim.

344 *a*. **Ilema cretacea.** (Plate XXVII. fig. 21.)

Ilema cretacea, Hmpsn. A. M. N. H. (8) viii. p. 401 (1911).

♂. Head and thorax chalky white slightly tinged with yellowish; pectus yellowish; palpi and legs tinged with fuscous; abdomen

yellowish with some whitish at base. Fore wing chalky white irrorated with a few brownish scales, the costal edge fulvous yellow. Hind wing chalky white, the inner margin and terminal area yellow. Underside of both wings yellow, the fore wing tinged with brown except on costal and inner areas.

Hab. Sikhim (*Möller*), 1 ♂ type. *Exp.* 28 millim.

*346 *a*. **Ilema pulverea.** (Plate XXVII. fig. 22.)

Ilema pulverea, Wileman, Entom. xliii. p. 178 (1910).

♂. Head and thorax dark leaden grey; palpi black at tips; antennæ blackish; pectus and legs fuscous brown; abdomen grey, brownish towards extremity. Fore wing dark leaden grey. Hind wing brownish white, darker on terminal half. Underside of fore wing fuscous brown.

Hab. Formosa, Rantaizan (*Wileman*), type † ♂ in Coll. Wileman. *Exp.* 42 millim.

346 *b*. **Ilema leia.** (Plate XXVII. fig. 23.)

Ilema leia, Hmpsn. A. M. N. H. (7) viii. p. 182 (1901).

♂. Pale grey-brown; abdomen yellowish at extremity. Hind wing whitish, the costal area pale grey-brown.

Fore wing with vein 6 from below angle of cell; 7, 8, 9 stalked; 11 anastomosing with 12.

Hab. N. Nigeria, Kateregi (*Macfie*), 1 ♂; Br. E. Africa, Uganda Ry., Mile 478 (*Betton*), 1 ♂ type; Natal, Estcourt (*Hutchinson*), 1 ♂; Cape Colony, Annshaw (*Miss F. Barrett*), 1 ♀. *Exp.* 24 millim.

347 *a*. **Ilema conisphora**, n. sp. (Plate XXVII. fig. 24.)

Head and thorax grey-white tinged with reddish brown; abdomen grey tinged with fuscous brown; palpi, pectus, legs, and ventral surface of abdomen blackish. Fore wing pale grey thickly irrorated with brown. Hind wing pale grey-brown. Underside of fore wing fuscous.

Fore wing with veins 7, 8, 9 stalked, 11 anastomosing with 12.

Hab. Gold Coast, Bibianaha (*Spurrell*), 1 ♂, 1 ♀ type. *Exp.* 18 millim.

348 *a*. **Ilema callidescens**, n. sp. (Plate XXVII. fig. 25.)

♂. Head and thorax greyish tinged with rufous; abdomen greyish ochreous, the ventral surface tinged with rufous. Fore wing greyish tinged with rufous. Hind wing ochreous white slightly tinged with rufous.

Fore wing with veins 7, 8, 9 stalked, 11 anastomosing with 12.
Hab. Gold Coast (*Johnston*), 1 ♂ type. *Exp.* 28 millim.

349. **Ilema mauritia**, insert, no. 318, *Ilema squalida*, Guen., which has precedence.

356. **Ilema lutarella**, insert:—

Lithosia pallifrons, ab. *grisea*, Fuchs, Soc. Ent. xviii. p. 73 (1903).
Both wings uniform grey.

Lithosia pallifrons, ab. *banghaasi*, Seitz, Gr. Schm. pal. ii. p. 68, pl. 13 *a* (1910).
A pale form with the veins of fore wing dark.

Lithosia lutarella, var. *nigrogrisea*, Pfennigschmidt, Int. Ent. Zeit. vi. p. 169 (1912).
Dark grey, the anal tuft and costa and cilia of fore wing yellow.

And del. *Lithosia sordidula*.

359. **Ilema sororcula**, insert:—

Ab. *plumbea*, Rebel, Ann. Hofmus. Wien, xxv. p. 377 (1911).
Fore wing blue-grey, the costa and cilia yellowish.—Hungary.

And del. *Lithosia affineola*, Brem., and the localities Amur, Japan, Tibet.

*359 *a*. **Ilema aurantioflava**. (Plate XXVII. fig. 26.)

Ilema aurantioflava, Roths. Nov. Zool. xix. p. 222 (1912).

♀. Head and thorax orange-ochreous; antennæ fuscous except at base; fore tibiæ in front and tarsi blackish; abdomen brownish grey, the anal tuft and ventral surface orange-ochreous. Fore wing uniform orange-ochreous. Hind wing ochreous whitish.
Fore wing with veins 7, 8, 9 stalked, 11 anastomosing with 12.
Hab. Sumbawa, Tambora (*Doherty*), type † ♀ in Coll. Rothschild. *Exp.* 30 millim.

*361 *a*. **Ilema testaceoflava**. (Plate XXVII. fig. 27.)

Ilema testaceoflava, Roths. Nov. Zool. xix. p. 221 (1912), ♂ (nec ♀).

♂. Head and thorax deep ochreous yellow, the antennæ fuscous; abdomen paler ochreous. Fore wing deep glossy ochreous yellow. Hind wing pale ochreous yellow.
Fore wing with veins 7, 8, 9 stalked, 11 free.
Hab. Br. N. Guinea, Kumusi R. (*Meek*), type † ♂ in Coll Rothschild. *Exp.* 30 millim.

361 *b*. **Ilema atrifrons.** (Plate XXVII. fig. 28.)

Ilema atrifrons, Hmpsn. A. M. N. H. (7) xix. p. 231 (1907).

♂. Head, tegulæ, patagia, pectus, and legs fulvous yellow; palpi, frons, and fore legs in front fuscous; dorsum of thorax and base of abdomen grey-white, the rest of abdomen yellow. Fore wing yellow with a whitish suffusion. Hind wing whitish yellow.

Hab. Nicobars (*G. Rogers*), 1 ♂ type. *Exp.* 26 millim.

361 *c*. **Ilema muscula.** (Plate XXVII. fig. 29.)

Lithosia muscula, Staud. Iris, xii. p. 156 (1899); Seitz, Gr. Schm. pal. ii. p. 66, pl. 12 *h*; Staud. Cat. Lep. pal. p. 377.

Head and tegulæ pale straw-yellow; thorax brownish ochreous; abdomen whitish with the extremity ochreous. Fore wing pale brownish ochreous, the costal area paler and yellower, narrowing to a point before apex. Hind wing very pale yellow. Underside of fore wing very slightly tinged with fuscous, the costal and terminal areas yellow.

Hab. Asia Minor, Amanus Mts., Eybiz, 2 ♀; Syria, 1 ♂. *Exp.* 30 millim.

362. **Ilema calamaria**, insert:—

Lithosia affineola, Brem. Lep. Ost-Sib. p. 97, pl. 8. f. 5 (1864).

which has precedence.

364 *a*. **Ilema aldabrensis**, n. sp. (Plate XXVII. fig. 30.)

Ilema decreta, Fryer, Trans. Linn. Soc., Zool. xv. p. 5 (1912), nec Butl.

♂. Head and thorax reddish ochreous; abdomen pale grey, the ventral surface reddish ochreous. Fore wing uniform ochreous white clothed with powdery scales. Hind wing ochreous white with a yellowish tinge. Underside of fore wing reddish ochreous.

♀. Head and thorax yellower; fore wing pale ochreous yellow; hind wing pale yellow.

Hab. Seychelles, Aldabra (*Fryer*), 5 ♂, 6 ♀ type. *Exp.* ♂ 18, ♀ 20 millim.

*367 *a*. **Ilema sericeoalba.** (Plate XXVII. fig. 31.)

Ilema sericeoalba, Roths. Nov. Zool. xix. p. 221 (1912).

♀. Head and thorax white, tinged with ochreous except the patagia; pectus white; legs ochreous; abdomen white, the sides tinged with yellow. Fore wing uniform silky white. Hind wing

white slightly tinged with yellow. Underside of fore wing suffused with brown except at apex; hind wing with the costa tinged with brown.

Fore wing with a broad areole, vein 11 anastomosing with 12.

Hab. Persia, Aschabad, Kopet Dagh, Ganden, type † ♀ in Coll. Rothschild. *Exp.* 36 millim.

*368 *a*. **Ilema sordidula.** (Plate XXVII. fig. 32.)

Lithosia sordidula, Rmbr. Cat. Lép. S. And. p. 210 (1858); Seitz, Gr. Schm. pal. ii. p. 68, pl. 13 *a*; Staud. Cat. Lep. pal. p. 378.

Head orange-yellow; antennæ grey; thorax white tinged with fuscous, the tegulæ yellow at sides; legs yellow; abdomen white tinged with fuscous, the anal tuft yellow in male. Fore wing silvery white, the inner half faintly tinged with fuscous, the costal edge black towards base. Hind wing silvery white, the costal area tinged with fuscous except at apex. Underside of fore wing suffused with fuscous, the costa yellow in male except towards base, white in female.

Hab. Spain, Andalusia, S. de Alfacar, in Coll. Püngeler. *Exp.* ♂ 30, ♀ 22 millim.

*370 *a*. **Ilema niveata.** (Plate XXVII. fig. 33.)

Ilema niveata, Roths. Nov. Zool. xix. p. 222 (1912).

♀. Head and thorax white, the head, tegulæ, and prothorax tinged with red-brown; pectus and legs suffused with rufous; abdomen white, the ventral surface suffused with rufous. Fore wing silvery white slightly irrorated with red-brown. Hind wing white. Underside white, the costa of fore wing tinged with rufous.

Fore wing with veins 7, 8, 9 stalked, 11 anastomosing with 12.

Hab. Br. N. Guinea, Angabunga R. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 38 millim.

*370 *b*. **Ilema minutissima.** (Plate XXVII. fig. 34.)

Ilema minutissima, Beth.-Baker, A. M. N. H. (8) vii. p. 536 (1911).

♂. Head, thorax, and abdomen white with a faint reddish brown tinge; pectus, legs, and ventral surface of abdomen more strongly tinged with brown. Fore wing glossy white, the terminal area very faintly tinged with brown. Hind wing white. Underside of fore wing tinged with brown.

Hab. Portuguese W. Africa, Gunnal, type † ♂ in Coll. Bethune-Baker. *Exp.* 16 millim.

*374 *a*. Calamidia castanea. (Plate XXVII. fig. 35.)

Calamidia castanea, Roths. Nov. Zool. xix. p. 224 (1912).

♀. Head and tegulæ yellowish white mixed with cupreous red-brown; thorax cupreous red-brown with a slight purplish gloss; abdomen whitish suffused with grey-brown. Fore wing cupreous red-brown with a slight purplish gloss and irrorated with some whitish, especially in submedian fold and on inner area towards tornus; some whitish at base of inner margin; an obscure blackish discoidal spot. Hind wing whitish, the terminal area tinged with red-brown to vein 2. Underside of fore wing suffused with pale red-brown; hind wing with the costal area and terminal area to vein 2 suffused with pale red-brown.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 36 millim.

374 *b*. Calamidia ougarra. (Plate XXVII. fig. 36.)

Ilema owgarra, Beth.-Baker, Nov. Zool. xv. p. 193 (1908).

♂. Head and thorax rufous mixed with whitish; vertex of head with dark point; tibiæ and tarsi banded fuscous and whitish; abdomen greyish white, the claspers and ventral surface tinged with ochreous. Fore wing pale rufous with slight dark irroration, the costa, discal fold in end of cell, submedian fold, and inner margin streaked with dark brown and whitish scales; the extremities of veins 4, 3, 2 with some white and dark brown scales. Hind wing whitish, the terminal half to submedian fold suffused with pale purplish brown; cilia white.

♀. Head and thorax variegated with dark brown; fore wing variegated with dark brown and whitish striæ, the terminal area mostly yellowish white from vein 3 to inner margin.

Hab. Br. N. Guinea, Owgarra (*Meek*), 1 ♂, 1 ♀. *Exp.* ♂ 36, ♀ 40 millim. Type † in Coll. Bethune-Baker.

*374 *c*. Calamidia varringtonella. (Plate XXVIII. fig. 1.)

Ilema warringtonella, Beth.-Baker, Nov. Zool. xv. p. 194 (1908).

♂. Head and tegulæ white tinged with red; palpi and antennæ black; thorax golden brown, the patagia with reddish white patch at base; pectus and legs white tinged with brown; abdomen white slightly tinged with rufous towards extremity. Fore wing golden brown with a fuscous tinge; the costal area white, expanding towards apex; the inner margin white beyond middle; the terminal area white from vein 3 to tornus. Hind wing fuscous brown, the area below the cell and vein 2 white.

Hab. Br. N. Guinea, Owgarra (*Meek*), type † ♂ in Coll. Bethune-Baker. *Exp.* 34 millim.

*374 *d*. **Calamidia goliathina.** (Plate XXVIII. fig. 2.)

Calamidia warringtonella goliathina, Roths. Nov. Zool. xix. p. 223 (1912).

♂. Head, tegulæ, and base of patagia orange-yellow, the palpi and antennæ blackish; thorax dark brown with a cupreous gloss; pectus and femora whitish, the fore tibiæ and tarsi fuscous, the mid and hind tibiæ and tarsi orange-yellow; abdomen whitish, the anal tuft and sides towards extremity yellowish. Fore wing brown with a silvery bronze gloss; the costal area whitish from before middle, expanding to vein 6 beyond the cell; the tornal area whitish. Hind wing whitish, the costal area except towards base and area beyond the cell to vein 2 pale brown; cilia whitish. Underside of fore wing fuscous brown, the terminal half of costa orange-yellow, the inner area whitish.

♀. Fore wing with the costal area whitish to base and more whitish at tornus.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* 32–36 millim.

Genus **MICRILEMA**.

	Type
Micrilema, Hmpsn. A. M. N. H. (7) xi. p. 343 (1903)	*craushayi*.

Proboscis fully developed; palpi short, porrect; antennæ of male minutely serrate and with long fasciculate cilia; tibiæ with the spurs moderate. Fore wing long and narrow; vein 2 from middle of cell, curved at base; 3 from well before angle; 5 absent; 6 shortly stalked with 7, 8, 9; 10 from cell; 11 anastomosing with 12. Hind wing with vein 2 from middle of cell; 3, 4 from angle; 5 absent; 6, 7 shortly stalked; 8 from middle of cell.

In key differs from *Monosyntaxis* (*Monotaxis*) in the hind wing having veins 6, 7 stalked.

374 *e*. **Micrilema craushayi.**

Micrilema craushayi, Hmpsn. A. M. N. H. (7) xi. p. 343 (1903).

♂. Head, thorax, and abdomen black suffused with leaden-grey; back of head with two yellow spots. Fore wing leaden fuscous; a

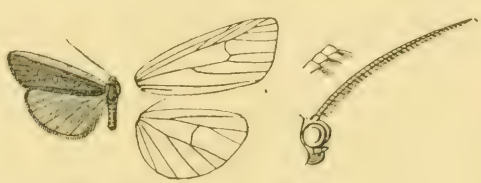

Fig. 108.—*Micrilema craushayi*, ♂. ¾.

broad costal orange fascia. Hind wing orange; a little leaden fuscous at base; cilia leaden fuscous except at tornus. Underside

of fore wing orange with diffused fuscous streaks from base and a slight discoidal spot.

Hab. Natal, Kimbolton (*Hutchinson*), 1 ♂; Basutoland, Machacha, 10,000′ (*Crawshay*), 3 ♂ type. *Exp.* 20 millim.

Genus **MONOSYNTAXIS.**

Monotaxis, Hmpsn. Cat. Lep. Phal. B.M. ii. p. 181 (1900), nec Hulst. Lep. 1898.
Monosyntaxis, Swinh. A. M. N. H. (7) vii. p. 466 (1901).

*375 *a*. **Monosyntaxis persimilis.**

Monosyntaxis persimilis, Roths. Nov. Zool. xix. p. 224 (1912).

Antennæ of male bipectinate with rather long branches to near apex.

♂. Head dark brown, the vertex yellow, the palpi yellow, black at tips; thorax silvery white, the tegulæ except at base and the basal half of patagia suffused with orange-yellow, the patagia and prothorax with dark brown spots; pectus and legs white, the fore legs in front, femur, tibial joints of mid and hind legs and the tarsi

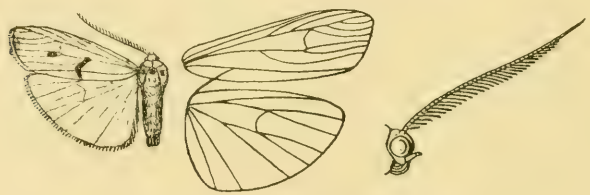

Fig. 109.—*Monosyntaxis persimilis*, ♂. ½.

at extremities fuscous; abdomen white, the anal tuft yellow. Fore wing silvery white; the costal edge black towards base; a narrow obliquely curved black-brown medial band from cell to inner margin and a spot beyond lower angle of cell. Hind wing semihyaline white. Underside of fore wing and the costa of hind wing suffused with orange-yellow.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 40 millim.

*375 *b*. **Monosyntaxis metallescens.**

Œonistis metallescens, Roths. Nov. Zool. xix. p. 225 (1912).

Antennæ of male bipectinate with moderate branches, the apical part serrate; fore wing with vein 9 from 10 anastomosing with 8 to form a broad areole.

Head and thorax cupreous brown, the vertex of head, tegulæ, and patagia silvery white suffused with golden yellow; pectus and legs

white suffused with yellow, the fore legs in front and the extremities of mid femora and base of tibiæ black-brown; abdomen white, tinged with ochreous at extremity. Fore wing silvery white, the basal half from just above median nervure to inner margin tinged with golden yellow; a cupreous brown fascia from basal part of costa to lower angle of cell and thence to just before termen below

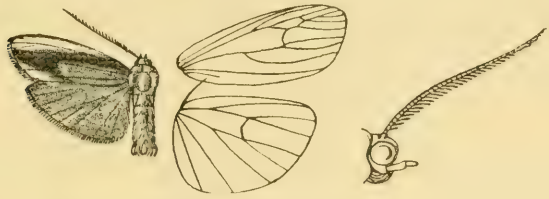

Fig. 110.—*Monosyntaxis metallescens*, ♂. ½.

apex, joined at lower angle of cell by an oblique band from middle of inner margin; cilia brown at tips except towards tornus. Hind wing yellowish white. Underside of fore wing and costal area of hind wing pale orange-yellow.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 40, ♀ 46 millim.

375 *c*. **Monosyntaxis bipunctata.**

Chrysæglia bipunctata, Beth.-Baker, Nov. Zool. xi. p. 420, pl. vi. f. 26 (1904).

Antennæ of male with short branches.

♂. Head, tegulæ, and patagia pale orange; antennæ black; thorax white with large blue-black patches on patagia, pro- and metathorax; abdomen white with the anal tuft orange; pectus, legs, and ventral surface of abdomen brownish white, the fore tibiæ and tarsi and mid and hind femoro-tibial joints black. Fore wing silky white with a slight yellowish tinge; costal edge black at base; an elliptical metallic blue medial patch from cell to above inner margin and a small triangular patch below base of vein 4. Hind wing semihyaline white, the costal area pale orange.

♀. Hind wing yellow.

Hab. Br. N. Guinea, Dinawa (*Pratt*), 1 ♂, Avola (*Pratt*), 1 ♂, Mt. Kebea, 6000′ (*Pratt*), 1 ♂, 1 ♀. *Exp.* ♂ 36–40, ♀ 44 millim. Type † ♂ in Coll. Bethune-Baker.

*375 *d*. **Monosyntaxis affinis.** (Plate XXVIII. fig. 3.)

Monosyntaxis affinis, Roths. Nov. Zool. xix. p. 224 (1912).

♀. Head, tegulæ, and base and outer edge of patagia orange-

yellow; antennæ black; palpi black at tips; thorax black glossed with metallic blue; pectus and legs brown, the coxæ and base of femora yellow, the tibiæ glossed with metallic blue; abdomen dark brown, the ventral surface orange-yellow. Fore wing dark reddish brown with some metallic blue-green suffusion on costal area, on basal inner area, and below end of cell; a broad orange-yellow fascia through the cell from base to apex, its lower edge expanding to vein 1 at base and bent upwards at lower angle of cell, extending to costa beyond the cell. Hind wing pale yellow.

Hab. Malay Peninsula, Gunong Ijau, type † ♀ in Coll. Rothschild. *Exp.* 40 millim.

375 *e*. **Monosyntaxis holman-hunti**, n. sp. (Plate XXVIII. figs. 4 ♂, 5 ♀.)

♂. Head and thorax brown suffused with bronze-green; coxæ in front and femora behind except towards extremities yellow; abdomen dark brown, the ventral surface yellow. Fore wing dark brown suffused with bronze-green, changing in some lights to purple; a rounded deep red subbasal spot from subcostal nervure to vein 1. Hind wing and underside of fore wing dark brown.

♀. Frons, tegulæ, and shoulders yellow; fore wing with large elliptical yellow subbasal patch and similar patches in end of cell and on costa towards apex; hind wing yellow, the termen brown, expanding into a patch on apical area; underside of fore wing with yellow patches as above, hind wing with the costa brown.

Hab. Selangor, Ulu Gambote (*Holman-Hunt*), 2 ♂, 1 ♀ type. *Exp.* ♂ 30, ♀ 40 millim.

*379 *a*. **Chrysorabdia vilemani.** (Plate XXVIII. fig. 6.)

Chrysorabdia taiwana, Wileman, Entom. xliii. p. 178 (1910), ♀ (nec ♂).
Chrysorabdia vilemani, Hmpsn. A. M. N. H. (8) viii. p. 401 (1911).

♀. Head, thorax, and abdomen yellow; palpi at tips, sides of frons, and antennæ black; tegulæ metallic green over black with yellow outer edge; femora towards extremities, tibiæ and tarsi green over black. Fore wing yellow; a broad black costal fascia suffused with metallic green and of nearly even width throughout; a similar oblique fascia from above inner margin near base to below vein 5 near termen, pointed towards base; cilia blackish on apical half. Hind wing yellow.

Hab. Formosa, Rantaizan (*Wileman*), type † ♀ in Coll. Wileman. *Exp.* 54 millim.

Genus **HELIORABDIA.**

Type.

Heliorabdia, Hmpsn. A. M. N. H. (8) viii. p. 402 (1911) ..... *taivana.*

Proboscis fully developed; palpi porrect, hardly extending beyond the frons which is smooth; eyes large, round; antennæ of male ciliated; tibiæ with the spurs moderate. Fore wing long and narrow; vein 2 from middle of cell; 3 from near angle; 4, 5 from angle; 9 from 10 anastomosing with 8 to form the areole, 7 from the areole; 11 from cell. Hind wing with veins 3 and 4 from angle of cell, 5 absent; 6, 7 coincident; 8 from middle of cell.

In key differs from *Apistosia* in the hind wing having veins 6, 7 coincident.

*380 *a.* **Heliorabdia taivana.**

Chrysorabdia taivana, Wileman, Entom. xliii. p. 178 (1910), ♂.

♂. Head, tegulæ, and patagia yellowish white; palpi black at tips; frons with lateral black bars; antennæ black; dorsum of thorax blue-black; fore and mid legs with the extremities of femora, the tibiæ and tarsi fuscous, the hind legs with the extremities of femora and base of tibiæ fuscous; abdomen brownish

[Fig. 111.—*Heliorabdia taivana*, ♂. ½.

white. Fore wing yellowish white; a blue-black fascia on costa, expanding beyond the cell to vein 6, then tapering to apex; a broad blue-black fascia below the cell from near base to well beyond the cell, pointed towards base and rounded at extremity. Hind wing yellowish white.

Hab. Formosa, Arizan (*Wileman*), type † ♂ in Coll. Wileman. *Exp.* 50 millim.

381. **Chrysæglia magnifica,** insert :—

Subsp. *taiwana*, Wileman, Entom. xliii. p. 189 (1910).

♂. Fore wing with the antemedial green patch on inner area conjoined to the costal fascia, the medial band expanding widely on inner side below the cell, the terminal band broad.

Hab. Formosa, Taiwan (*Wileman*), type † ♂ in Coll. Wileman.

*382 *a*. Œonistis lifuensis. (Plate XXVIII. fig. 7.)

Œonistis lifuensis, Roths. Nov. Zool. xix. p. 225 (1912).

♂. Head and thorax orange-yellow; antennæ and palpi black; upper edge of patagia and dorsum of thorax with black-brown patches, the metathorax with blue-black patch; fore and mid legs with the extremities of femora, the tibiæ and tarsi black-brown, the hind legs with the extremities of femora, the base and extremities of tibiæ and the extremities of tarsi black-brown; abdomen orange-yellow. Fore wing pale yellow; the costa black-brown suffused with metallic blue to towards apex; a narrow black-brown discoidal band suffused with metallic blue, expanding on inner side into a quadrate patch below the cell, and a rather conical postmedial patch between vein 6 and the submedian fold. Hind wing pale yellow.

♀. Fore wing silvery white tinged with yellow; hind wing yellowish white.

Hab. Loyalty Is., Lifu, type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 32, ♀ 42 millim.

382 *b*. Œonistis bicolora.

Œonistis bicolora, Beth.-Baker, Nov. Zool. xi. p. 420, pl. vi. f. 34 (1904).

Head blue-black; palpi crimson, lower part of frons greyish; thorax ochreous with the tegulæ tipped with crimson, the dorsum blackish with blue spot on metathorax; legs crimson with the fore and mid tibiæ and tarsi and the base of hind tibiæ black above; abdomen ochreous, orange at extremity. Fore wing ochreous with the costal edge tinged with crimson; a bluish streak below costa to beyond middle; some brown suffusion below middle of costa and a black streak on middle of subcostal nervure; an elliptical blue medial spot from cell to above inner margin confluent with a blue fascia below end of cell, bent up round its lower angle. Hind wing orange-yellow. Underside with the costal area of both wings suffused with crimson.

Hab. Br. N. Guinea, Dinawa, 4000′ (*Pratt*), type † ♂ in Coll. Bethune-Baker, Owgarra (*Meek*), 1 ♂, Biagi Mambare (*Meek*), 1 ♀; Goodenough I. (*Meek*), 1 ♂. *Exp.* 44 millim.

*382 *c*. Œonistis bistrigata. (Plate XXVIII. fig. 8.)

Œonistis bistrigata, Roths. Nov. Zool. xix. p. 225 (1912).

♂. Head and thorax brown with a metallic blue gloss, the frons with a yellow bar above, the basal joint of antennæ yellow in front; tegulæ yellow at base and with deep crimson tips; patagia yellow except upper edge; palpi, pectus, and legs deep crimson, the fore legs and mid tibiæ and basal joint of tarsi in front and base of hind tibiæ black-brown glossed with blue; abdomen orange-yellow. Fore wing orange-yellow; the costal edge crimson with a dark

brown fascia glossed with metallic blue below it narrowing to a point beyond middle; an oblique quadrate brown patch glossed with blue from below middle of cell to inner margin on which it emits a fascia towards base, its outer edge emitting a curved fascia to vein 5 beyond lower angle of cell; the terminal area and cilia tinged with red-brown. Hind wing pale orange-yellow. Underside of fore wing and costal area of hind wing deep orange-yellow. Fore wing with vein 7 from beyond 9, 10 shortly stalked with 7, 8, 9; hind wing with veins 4, 5 stalked to near termen.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 48 millim.

Genus **ŒONOSIA**, nov.

Type, *Œ. aurifera.*

Proboscis fully developed; palpi upturned, reaching to about middle of frons, which is smooth; antennæ of male bipectinate with short branches, the apical part ciliated; tibiæ with the spurs moderate. Fore wing rather long and narrow, the apex rounded, the termen evenly curved; vein 2 from middle of cell, curved at base; 3 from well before angle; 4, 5 from angle; 9 from 10 anastomosing with 8 to form the areole, 6 from the areole; 11 anastomosing with 12. Hind wing with vein 2 from middle of cell; 3 from near angle; 4, 5 shortly stalked; 6, 7 shortly stalked; 8 from middle of cell.

In key differs from *Agylla* in the fore wing having vein 11 anastomosing with 12.

*382 *d.* Œonosia aurifera.

Œonistis aurifera, Roths. Nov. Zool. xix. p. 225 (1912).

♂. Head and thorax glossy orange-yellow; palpi, frons, and antennæ black-brown, the palpi fringed with orange-yellow hair in front at base; extremities of femora and the tibiæ in front black-brown, the tarsi black-brown ringed with yellow; abdomen

Fig. 112.—*Œonosia aurifera*, ♂. ½.

orange-yellow. Fore wing pale glossy orange-yellow, the costa black-brown suffused with metallic blue to beyond middle, then the costal edge black-brown; an antemedial black-brown spot suffused with metallic blue above inner margin and a rather diamond-shaped patch in and below end of cell from discal fold to

above inner margin; cilia black-brown except at tornus. Hind wing orange-yellow. Underside of fore wing orange-yellow, the costa black-brown towards base.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 42 millim.

384 *a*. Agconia ovifera.

Agkonia ovifera, Dogn. Ann. Soc. Ent. Belg. l. p. 181 (1906).

Fore wing of male with large elliptical fovea on medial part of median nervure filled with waxen white scales; hind wing without patch of androconia.

♂. Head and thorax ochreous suffused with rufous; the tuft of hair on hind tibiæ black; abdomen pale yellow with blackish patches at base of claspers below. Fore wing pale yellow, the costal

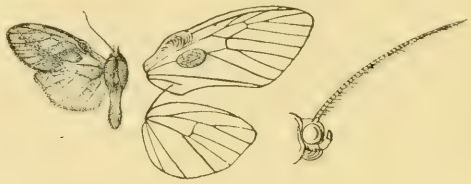

Fig. 113.—*Agconia ovifera*, ♂. ½.

lobe suffused with red-brown with some brown irroration running obliquely from its extremity to inner margin beyond middle, where it is met by an oblique band of brown irroration from vein 7 beyond middle; the terminal area slightly irrorated with brown; cilia brown. Hind wing pale yellow.

Hab. Peru, Carabaya, La Oroya (*Ockenden*), 1 ♂. *Exp.* 30 millim. Type † ♂ in Coll. Dognin.

*385 *a*. Disoidemata quadriplaga. (Plate XXVIII. fig. 9.)

Disoidemata quadriplaga, Dogn. Mém. Soc. Ent. Belg. xix. p. 125 (1912)

♂. Head and thorax creamy white, the dorsum of thorax grey-brown; palpi blackish; pectus and legs suffused with brown; abdomen grey-brown, the ventral surface whitish towards extremity. Fore wing creamy white; the costal edge black towards base; a crescentic black mark on inner area before and below the fovea; a large somewhat quadrate black patch on postmedial area from vein 6 to submedian fold, extending from the cell to near termen, conjoined to some brown suffusion below middle of costa; a rather punctiform blackish terminal line; cilia chequered with black at middle and towards tornus. Hind wing brown, the cilia

creamy white. Underside of fore wing with the black patch extending to below middle of costa.

Hab. Fr. Guiana, St. Jean Maroni (*Le Moult*), type † ♂ in Coll. Dognin. *Exp.* 14 millim.

*389*a*. Macroptila antonia.

Macroptila antonia, Dogn. Hét. Nouv. Am. Sud, iii. p. 6 (1911).

Fore wing of male very narrow, the inner margin highly arched, vein 7 from beyond 9; 10 curved towards base, the inner margin fringed with long upturned hair on underside, a patch of long spatulate upturned scales below end of cell and a patch of androconia beyond the cell; hind wing very broad, the costa highly arched towards apex and fringed with hair except towards base.

Fig. 114.—*Macroptila antonia*, ♂. ½.

♂. Head, thorax, and abdomen white, the tegulæ tinged with yellow; antennæ yellow; pectus, legs, and ventral surface of abdomen ochreous yellow, the fore and mid legs suffused with brown in front. Fore wing silvery white, the inner margin and cilia faintly tinged with brown. Hind wing white. Underside of fore wing and costal area of hind wing tinged with brown.

Hab. Colombia, Antonio (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 40 millim.

389 *b*. Macroptila monstralis.

Macroptila monstralis, Schaus, A. M. N. H. (8) vii. p. 357 (1911).

Fore wing with vein 6 from below angle of cell, 7, 8, 9 stalked, the cell of male broad with slight fringe of hair on extremity of median nervure on underside; hind wing with the cell broad and long, vein 6 from below angle of cell, 8 from close to angle, a glandular patch in upper part of cell near base, the upperside with the cell and area beyond it clothed with androconia to near termen, a patch of downturned hair at apex; fore femora fringed with fulvous hair above.

♂. Head and thorax reddish brown mixed with whitish; pectus and legs whitish suffused with brown, the fore legs fuscous brown with the fringe of hair on femora fulvous; abdomen whitish. Fore wing whitish suffused with red-brown, the terminal area

whiter from costa to vein 3. Hind wing whitish suffused with brown, the androconia in and beyond the cell rufous, the hair on apical area darker. Underside of fore wing whiter; hind wing with the costal half grey-brown, the inner half white.

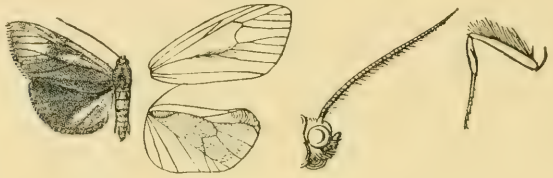

Fig. 115.—*Macroptila monstralis*, ♂. ½.

♀. Head and thorax white tinged with brown; abdomen white; fore wing silvery white, the inner area to submedian fold suffused with brown; hind wing white.

Hab. Costa Rica, Sixola R. (*Schaus*), 1 ♂, Esperanza (*Schaus*), 1 ♀. *Exp.* 32 millim.

389 *c*. **Macroptila nubecula.**

Macroptila nubecula, Schaus, A. M. N. H. (8) vii. p. 357 (1911).

Fore wing with vein 6 from below angle of cell, 7, 8, 9 stalked, male with a large patch of androconia below the cell on underside, the median nervure curved upwards; hind wing with veins 6, 7 stalked and bent downwards, 8 from close to angle of cell, the costa lobed at apex, a large glandular patch occupying nearly the whole cell, the costal area and area round the patch clothed with androconia.

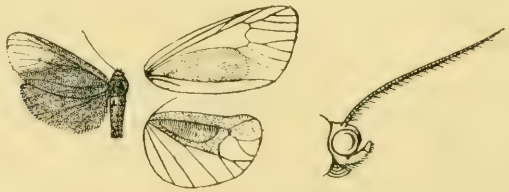

Fig. 116.—*Macroptila nubecula*, ♂. ½.

♂. Head and thorax white tinged with brown; pectus and legs tinged with rufous; abdomen white faintly tinged with brown. Fore wing silvery white tinged with brownish ochreous to origin of vein 2 and below vein 2 to termen. Hind wing white with a faint ochreous tinge except on inner area; the underside with the costal area and cell tinged with reddish ochreous, the glandular patch greyish.

Hab. Costa Rica, Esperanza (*Schaus*), 1 ♂. *Exp.* 30 millim.

*389 *d*. **Macroptila extensa.** (Plate XXVIII. fig. 10.)

Agylla extensa, Roths. Nov. Zool. xix. p. 227 (1912).

♀. Head, thorax, and abdomen pale red-brown mixed with some whitish; legs white tinged with brown; anal tuft white. Fore wing silvery white, the costa red-brown towards base, the inner area suffused with red-brown to median nervure and vein 2. Hind wing white. Underside of fore wing white, the costal area tinged with red-brown towards base. Fore wing with the upper part of cell much produced and vein 7 from angle.

Hab. Peru, Carabaya, R. Suambari (*Ockenden*), type † ♀ in Coll. Rothschild. *Exp.* 42 millim.

390 *a*. **Macroptila fuscilaniata,** n. sp. (Plate XXVIII. fig. 11.)

♂. Head and thorax ochreous tinged with brown; abdomen ochreous. Fore wing ochreous, the inner area suffused with fuscous brown, the costal edge blackish towards base. Hind wing ochreous, the costal area slightly tinged with brown. Underside of fore wing with the long spatulate scales ochreous with a patch of fuscous scales below them above inner margin; hind wing with the costal area ochreous, the inner area whitish.

♀. Head, thorax, and abdomen white tinged with brown; fore wing silvery white, the inner margin narrowly tinged with brown; hind wing silvery white with a chalky tinge towards base.

Hab. Colombia, Yuntas, Rio Siata, Slopes of Choco, 1 ♂ type, San Antonio (*Fassl*), 1 ♂, 1 ♀, Tolima, 1 ♂. *Exp.* ♂ 40, ♀ 46 millim.

Genus **APTILOSIA.**

	Type.
Aptilosia, Schaus, A. M. N. H. (8) vii. p. 357 (1911).....	*crocea*.

Proboscis fully developed; palpi short, porrect, in male fringed with hair below; frons smooth; eyes large, round; antennæ of male ciliated; thorax clothed with rough hair; abdomen clothed with rough hair and in male with lateral tufts of downturned hair towards extremity. Fore wing long and narrow, the apex somewhat produced, the termen oblique and nearly straight in male; vein 3 from well before angle of cell; 4, 5 from angle in male, stalked in female; 6 from well below upper angle; 7, 8, 9, 10 stalked; 11 from cell. Hind wing with vein 3 from before angle of cell; 4, 5 from angle in male, stalked in female; 6, 7 coincident in male, stalked in female; 8 from middle of cell; male with a large glandular patch in and above the cell beyond where vein 8 is given off, the subcostal nervure curved downwards, the lower part of cell clothed with long hair on upperside.

In key differs from *Leptopepla* in the hind wing having veins 6, 7 coincident in male, stalked in female.

390 *b*. **Aptilosia crocea.**

Aptilosia crocea, Schaus, A. M. N. H. (8) vii. p. 358 (1911).

♂. Head and thorax ochreous yellow suffused with red-brown; pectus, legs, and abdomen ochreous yellow tinged with red-brown.

Fore wing pale ochreous yellow, the inner area to median nervure and vein 2 suffused with red-brown. Hind wing and underside of both wings pale ochreous yellow.

Fig. 117.—*Aptilosia crocea*, ♂. ½.

♀. Head and thorax white tinged with brown; abdomen white; fore wing silvery white, the inner area narrowly suffused with brown; hind wing white.

Hab. Costa Rica, Guapiles (*Schaus*), 1 ♂, Juan Vinas (*Schaus*), 1 ♀. *Exp.* 26 millim.

Genus **TRICHAREVA**, nov.

Type, *T. fulvilaniata*.

Proboscis fully developed; palpi upturned, reaching to about middle of frons and slightly fringed with hair; antennæ of male with bristles and cilia; hind tibiæ with two pairs of spurs. Fore wing moderately broad, the apex rounded, the termen obliquely curved; vein 2 from before middle of cell, sinuous; 3 from well before angle; 4, 5 stalked; 6 from well below upper angle; 7, 8, 9, 10 stalked; 11 from cell; male with fringe of long upturned hair in submedian fold from near base to beyond middle and a costal fold fringed with hair on anderside from middle to apex. Hind wing with vein 2 from before middle of cell; 3 from before angle; 4, 5 stalked; 6, 7 from upper angle; 8 from towards end of cell; male with a large patch of flocculent hair in end of cell on upperside.

In key differs from *Leptopepla* in both wings having veins 4, 5 stalked.

*390 *c*. **Trichareva fulvilaniata.**

Trichareva fulvilaniata, Dogn. Hét. Nouv. Am. Sud, vii. p. 11 (1914).

♂. Head, thorax, and abdomen white tinged with fuscous brown;

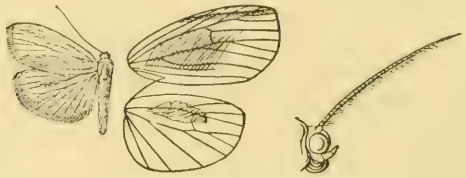

Fig. 118.—*Trichareva fulvilaniata*, ♂. ½.

antennæ tinged with fulvous. Fore wing silvery white, the inner

area tinged with pale brown; the costal edge blackish towards base. Hind wing white, the woolly hair in cell fulvous. Underside of fore wing with the fringe of long hair fulvous yellow.

Hab. Panama, Lino (*Fassl*), type ♂ in Coll. Dognin. *Exp.* 28 millim.

Genus **METAGYLLA**.

Type.

Metagylla, Hmpsn, A. M. N. H. (7) xix. p. 231 (1907) ..... *miroides*.

Proboscis fully developed; palpi upturned, short, the 2nd joint fringed in front with rather short downturned hair, the 3rd small with pointed tuft in front; antennæ of male with bristles and cilia; tibiæ with the spurs moderate; abdomen of male with large dorsal and lateral anal tufts of hair. Fore wing rather narrow; veins 3, 4, 5 from angle of cell; 6 from below upper angle; 7, 8, 9 stalked, 7 from before 8; 10, 11 from cell. Hind wing with vein 3 shortly stalked with 4, 5; 6, 7 coincident; 8 from middle of cell; male with a patch of androconia and fringe of long hair in and beyond end of cell on upperside.

In key differs from *Lamprostola* in the hind wing having vein 5 stalked with 3, 4.

392 *a*. **Metagylla miroides**.

Metagylla miroides, Hmpsn. A. M. N. H. (7) xix. p. 231 (1907).

♂. White; head and thorax above and fore tibiæ and tarsi in front tinged with fuscous; palpi with the tuft on 3rd joint fuscous; abdomen with the dorsal anal tuft fulvous, the lateral tufts

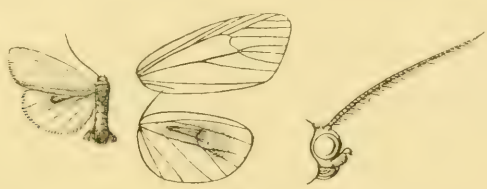

Fig. 119.—*Metagylla miroides*, ♂. ½.

fuscous. Fore wing with the costal area and inner area to cell and vein 2 slightly tinged with fuscous. Hind wing with the patch of androconia deep rufous with some ochreous suffusion beyond it, the fringe of hair ochreous.

Hab. Fr. Guiana, St. Jean Maroni (*Schaus*), 1 ♂ type. *Exp.* 28 millim.

398 *a*. **Agylla crassa**. (Plate XXVIII. fig. 12.)

Agylla crassa, Dogn, Hét. Nouv. Am. Sud, iii. p. 7 (1911).

♂. Head and thorax fuscous brown mixed with grey-white; antennæ fulvous, brown towards base; pectus and legs yellow, the

fore and mid legs suffused with brown in front; abdomen yellow. Fore wing silvery white; the costa fulvous yellow, the costal edge blackish towards base; the inner area fuscous to submedian fold except at base; cilia fuscous at tips. Hind wing white.

Hab. Colombia, Bogotá (*Fassl*), 1 ♂, Paramo del Quindin, type † ♂ in Coll. Dognin. *Exp.* 38 millim.

398 *b*. **Agylla fusciceps**, n. sp. (Plate XXVIII. fig. 13.)

♂. Head and tegulæ fuscous brown, the rest of thorax white; antennæ fulvous; abdomen white tinged with brown; palpi, pectus, legs and ventral surface of abdomen fulvous orange, the fore tibiæ and tarsi brown in front. Fore wing silvery white, the inner area suffused with pale brown except at base; the costal edge fulvous orange. Hind wing white with a faint ochreous tinge. Underside of fore wing tinged with brown.

♀. Back of head and tegulæ except a dorsal patch white; fore wing with the inner area white except a pale brownish streak on vein 1, the costal edge not orange; hind wing and underside of fore wing white.

Hab. Colombia, Monte Socorro and Monte Tolima; Peru, Agualani (*Ockenden*), 2 ♂ type. *Exp.* ♂ 40, ♀ 44 millim.

400 *a*. **Agylla fulvithorax**, n. sp. (Plate XXVIII. fig. 14.)

♂. Head white with a fuscous bar between antennæ which are orange; palpi orange; tegulæ orange with some fuscous scales; patagia orange, white at tips; thorax white, suffused with fuscous in front; pectus, legs, and abdomen orange. Fore wing silvery white, the costal edge orange. Hind wing white.

Hab. Colombia, San Juan, La Selva, 1 ♂ type. *Exp.* 44 millim.

400 *b*. **Agylla subochrea**. (Plate XXVIII. fig. 15.)

Agylla subochrea, Dogn. Hét. Nouv. Am. Sud, vii. p. 12 (1914).

♂. Head fulvous orange, the vertex brown; thorax white; abdomen pale yellow; pectus, legs, and ventral surface of abdomen fulvous orange. Fore wing silvery white with a creamy tinge, the costal edge fulvous orange. Hind wing chalky white. Underside of fore wing and costal area of hind wing ochreous.

Hab. Colombia (*Fassl*), type † ♂ in Coll. Dognin, San Antonio (*Fassl*), 1 ♂. *Exp.* 46 millim.

*401 *a*. **Agylla bisecta**. (Plate XXVIII. fig. 16.)

Agylla bisecta, Roths. Nov. Zool. xix. p. 226 (1912).

♀. Head, thorax, and abdomen fuscous brown; palpi and frons

yellow; pectus, legs, and ventral surface of abdomen yellow, the fore legs fuscous brown in front. Fore wing yellowish white, the costa towards base and inner area to median nervure fuscous brown with a greyish gloss. Hind wing pale yellow. Underside of fore wing reddish brown, the costa orange-yellow except towards base, the inner area yellowish white.

Hab. N. Borneo, Kina Balu, type † ♀ in Coll. Rothschild. *Exp.* 42 millim.

402 *a*. Agylla nitidalis.

Hydrocampa nitidalis, Mssn. Stübel's Reise, p. 171, pl. ix. f. 25 (1890).
Agylla nochiza, Hmpsn. Cat. Lep. Phal. B.M. ii. p. 196 (part.).

♂. Head and tegulæ fuscous; antennæ fulvous; thorax white tinged with ochreous, the tibiæ and tarsi fuscous; abdomen white tinged with fuscous dorsally and ochreous ventrally. Fore wing white tinged with ochreous especially on costal area; a large fuscous patch on inner margin from before middle to near tornus, curved above and extending at middle to median nervure and enclosing a curved white patch from below median nervure to inner margin; a small fuscous discoidal spot; cilia fuscous at tips. Hind wing white with a slight yellowish tinge.

♀. Fore wing with the ground-colour silvery white.

Hab. W. Colombia, San Antonio (*Palmer*), 1 ♂; Ecuador, R. Postaza, La Victoria, 1 ♀; Bolivia, Chaco (*Garlepp*), 1 ♀; S.E. Peru, S. Domingo, 1 ♂, 1 ♀. *Exp.* ♂ 40, ♀ 44 millim.

407 *a*. Agylla virago. (Plate XXVIII. fig. 17.)

Agylla rufifrons, virago, Roths. Nov. Zool. xx. p. 224 (1913).

Head and tegulæ orange, the vertex of head and tegulæ suffused with red; antennæ and thorax black-brown; palpi brown at tips; pectus, legs, and abdomen yellow, the fore and mid tibiæ and the tarsi suffused with brown. Fore wing black-brown; a pale yellow fascia on costa from base to beyond middle and a fascia on inner margin. Hind wing yellow. Underside of fore wing irrorated with whitish, the costal, inner, and terminal areas yellow.

Hab. Formosa, Horisha, type † ♂ in Coll. Rothschild, Rantizan (*Wileman*), 3 ♀. *Exp.* ♂ 50, ♀ 66 millim.

409 *a*. Agylla exscissa.

Agylla exscissa, Schaus, A. M. N. H. (8) vii. p. 360 (1911).

Fore wing of male with the inner area forming a large lobe extending to beyond middle, the tornal area truncate below vein 2, an elongate patch of thick fulvous androconia below middle of cell on underside, the end of cell and area beyond it clothed with rough downturned ochreous scales; hind wing very ample with some hairy scaling below and beyond end of cell on upperside, the underside with elliptical patch of ochreous androconia in cell with hyaline

streak below it, the whole wing except inner area clothed with hairy black-brown scaling; fore femora with tufts of ochreous brown hair.

♂. Head and thorax white suffused with fuscous brown; palpi ochreous brown; legs tinged with brown; abdomen white dorsally

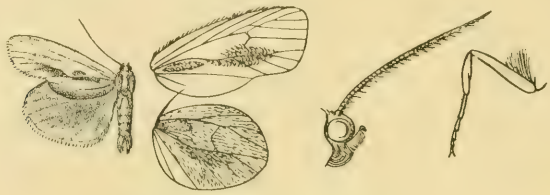

Fig. 120.—*Agylla exscissa*, ♂. ½.

tinged with fuscous, ventrally with ochreous brown, the lateral tufts towards extremity fuscous. Fore wing silvery white, the lobed part of inner area fuscous brown, its extremity met by a shade from lower end of cell. Hind wing silvery white, the basal area with an ochreous tinge, the apical part of costal area and the area beyond lower angle of cell with a fuscous tinge. Underside of fore wing and basal costal area of hind wing suffused with ochreous.

Hab. Costa Rica, Sixola R. (*Schaus*), 1 ♂. *Exp.* 30 millim.

409 *b*. **Agylla eriodes**, n. sp.

Fore wing of male with the cell and area just beyond it clothed with downturned hair, a fringe of woolly hair in submedian fold below terminal half of cell on underside; hind wing with the cell

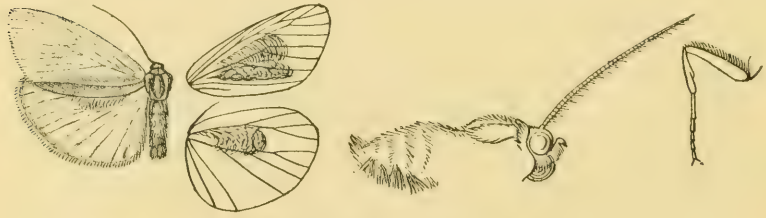

Fig. 112.—*Agylla eriodes*, ♂. ½.

clothed with woolly hair except at base on upperside; palpi fringed with downturned hair in front, fore femora fringed with hair above; abdomen clothed with tufts of rough hair below.

♂. Head and thorax white tinged with fuscous brown; antennæ tinged with fulvous; palpi fuscous fringed with fulvous hair in front; pectus with fulvous hair; legs white, the fore femora fringed with fulvous hair above, the tibiæ and tarsi fuscous in front; abdomen white, the rough hair on underside fulvous. Fore wing

silvery white, the costal edge ochreous, the inner area with a faint brownish tinge. Hind wing white, the costal area and hair in cell ochreous. Underside of fore wing with the costa and hair in and below the cell fulvous, the terminal area tinged with fuscous; hind wing with the costal area broadly tinged with fuscous.

Hab. Peru, La Oroya (*Ockenden*), 1 ♂ type. *Exp.* 46 millim.

411 *a*. **Agylla œdiphlebia**, n. sp.

Fore wing of male with the area below the cell and the end of cell clothed with ochreous androconia and a round brownish glandular swelling on median nervure beyond vein 2 on underside. Hind wing with the costal half clothed with ochreous androconia on upperside.

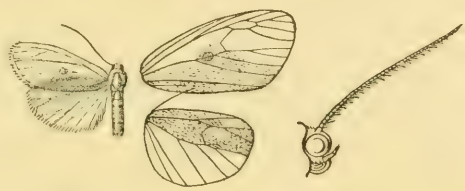

Fig. 122.—*Agylla œdiphlebia*, ♂. ½.

♂. Head, thorax, and abdomen white tinged with brown, the anal tuft whiter, the hind tibiæ and tarsi pure white. Fore wing silvery white, the inner area below submedian fold suffused with brown. Hind wing white, the costal area to median nervure and vein 4 suffused with ochreous scales. Underside of fore wing with the fringe of hair on costa brownish, black towards base.

Hab. Ecuador, Quevido, 1 ♂ type. *Exp.* 30 millim.

411 *b*. **Agylla megasema**, n. sp. (Plate XXVIII. fig. 18.)

Fore wing of male with the gland on median nervure large, elliptical, and extending from discal fold to vein 2.

♂. Head and thorax white tinged with grey; antennæ fulvous; palpi tinged with brown; pectus, legs, and abdomen white, the fore legs tinged with brown. Fore wing silvery white, the inner area tinged with brown. Hind wing pale fulvous brown to median nervure and vein 5, the inner half silvery white. Underside white; fore wing with the patch of androconia fulvous.

Hab. Peru, Yahuarmayo, 1 ♂ type. *Exp.* 34 millim.

411 *c*. **Agylla albivenis**.

Agylla albivenis, Schaus, A. M. N. H. (8) vii. p. 359 (1911).

Fore wing of male with fringe of downturned scales on upperside of costa from before middle to apex, the underside with the cell and submedian interspace to end of cell clothed with androconia.

♂. Head, thorax, and abdomen grey suffused with fuscous; fore legs blackish, hind legs, ventral surface of abdomen and lateral tufts at extremity whitish. Fore wing white, the interspaces suffused and irrorated with grey, the inner area greyish fuscous to cell and vein 3; the fringe of scales on costa ferruginous grey; a broad greyish fuscous shade across end of cell from the costal fringe to

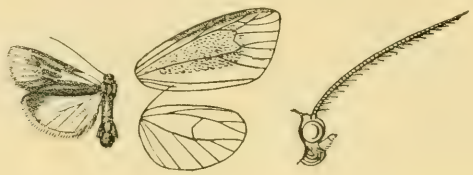

Fig. 123.—*Agylla albivenis*, ♂. ½.

the dark inner area; cilia tinged with fuscous. Hind wing white, the costal area and the terminal area to discal fold suffused with fuscous. Underside of fore wing greyish fuscous, the cell and area just below it blackish; hind wing with the costal area greyish fuscous.

♀. Fore wing white, the inner area to submedian fold suffused with greyish fuscous, the cilia tinged with fuscous; hind wing wholly white; underside of fore wing with the terminal area and cilia tinged with fuscous.

Hab. Costa Rica, Juan Vinas (*Schaus*), 1 ♂, 1 ♀. *Exp.* ♂ 26, ♀ 30 millim.

413 *a*. Agylla auranticaria.

Agylla auranticaria, Schaus, Pr. U.S. Nat. Mus. xxix. p. 196 (1905).

Fore femora of male with fringe of long hair above; fore wing with the fringe of hair below the cell orange-yellow; hind wing

Fig. 124.—*Agylla auranticaria*, ♂. ½.

without brown hair between the flocculent white hair and black scales; palpi unusually short, especially in female where they hardly extend to frons.

♂. Head, thorax, and abdomen white tinged with fuscous; the ventral surface whiter. Fore wing white, the inner area tinged with

fuscous to submedian fold; the costal edge black towards base. Hind wing white slightly tinged with fuscous. Underside of fore wing with the apical area slightly tinged with fuscous.

Hab. Fr. Guiana, St. Jean Maroni (*Schaus*), 1 ♂. *Exp.* ♂ 28 millim. Type † ♂ in U.S. Nat. Mus.

414. **Agylla fasciculata**, insert (syn.) :—

Salopala hypotricha, Feld. Reis. Nov. pl. 138. f. 30 (1874); Kirby, Cat. Het. p. 440.

*414 *a*. **Agylla trichosema.**

Agylla trichosema, Dogn. Hét. Nouv. Am. Sud, vii. p. 13 (1914).

Fore wing of male on underside with streak of hairy scales below median nervure towards end of cell; hind wing with vein 5 from the cell.

♂. Head and thorax white mixed with fuscous brown; antennæ fulvous yellow; abdomen pale brownish ochreous. Fore wing silvery

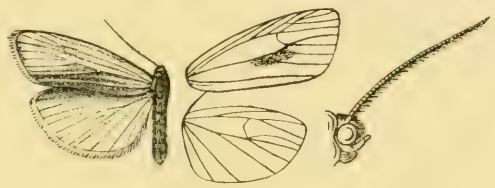

Fig. 125.—*Agylla trichosema*, ♂. ½.

white, the area below the cell suffused with pale brown; the costal edge pale brown, blackish towards base. Hind wing creamy white. Underside of fore wing fuscous brown, the streak of hairy scales rufous; hind wing with the costal area fuscous brown.

Hab. Colombia, Bogotá (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 44 millim.

*415 *a*. **Agylla barbula.**

Agylla barbula, Dogn. Hét. Nouv. Am. Sud, iii. p. 6 (1911).

Fore wing of male with a streak of ochreous androconia in lower

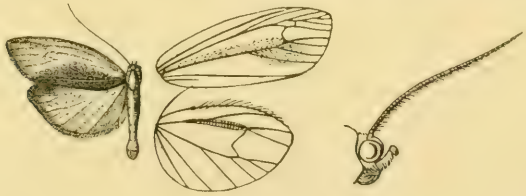

Fig. 126.—*Agylla barbula*, ♂. ½.

part of cell, expanding into a patch below its extremity; hind wing

with the costa fringed with long hair except at base, the cell very long with the subcostal nervure beyond vein 8 thickened by a streak of brown androconia on upperside.

♂. Head and thorax fuscous brown mixed with some ochreous white; legs ochreous, the fore and mid legs suffused with brown in front; abdomen white, the anal tuft and ventral surface ochreous yellow. Fore wing pale ochreous yellow, the inner area suffused with fuscous brown to the cell and vein 2. Hind wing white; the underside with the hair on costa ochreous yellow.

Hab. Colombia, San Antonio (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 34 millim.

415 *b*. Agylla pseudobisecta. (Plate XXVIII. fig. 19.)

Agylla pseudobisecta, Roths. Nov. Zool. xix. p. 227 (1912).

♀. Head and thorax dark reddish brown, the tegulæ orange at base; palpi orange except at tips; pectus and legs orange-yellow, the fore legs suffused with brown in front; abdomen pale orange-yellow, dorsally tinged with red-brown. Fore wing pale glossy yellow, the inner area dark reddish brown to submedian fold and vein 2, its upper edge angled to median nervure at origin of vein 2. Hind wing yellowish white. Underside of fore wing wholly suffused with red-brown.

Hab. Colombia, Monte Tolima (*Fassl*), 1 ♀. *Exp.* 44 millim. Type † ♀ in Coll. Rothschild; this may be the female of *A. barbula*.

415 *c*. Agylla brunneostriata. (Plate XXVIII. fig. 20.)

Agylla brunneostriata, Hmpsn. A. M. N. H. (8) iv. p. 353 (1909).

♂. Head and thorax ochreous suffused with reddish brown; abdomen ochreous white. Fore wing ochreous white, the inner half suffused and irrorated with red-brown forming ill-defined streaks in the interspaces between veins 5 and 2; a brown streak below basal half of costa and two short streaks in end of cell; slight brown streaks in the interspaces below costa towards apex and slight brown marks in the terminal interspaces towards apex. Hind wing white slightly tinged with brown, the terminal area more strongly tinged; the underside with the costal half suffused with brown.

Hab. S.E. Peru, Limbani (*Ockenden*), 2 ♂ type. *Exp.* 44 millim.

415 *d*. Agylla submacula.

Agylla submacula, Schaus, A. M. N. H. (8) vii. p. 360 (1911).

Fore wing of male with patch of androconia on underside in and beyond end of cell; palpi fringed with downcurved hair in front; abdomen with long lateral tufts on terminal segments.

♂. Head, thorax, and abdomen white tinged with fuscous; palpi blackish at tips; pectus, legs, and ventral surface of abdomen white, the fore tibiæ and tarsi blackish, the latter slightly ringed with white. Fore wing silvery white, the area below submedian fold suffused with fuscous. Hind wing silvery white, the terminal area below vein 2 tinged with fuscous. Underside of fore wing

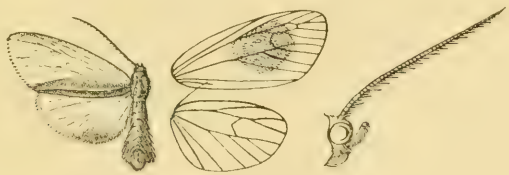

Fig. 127.—*Agylla submacula*, ♂. ½.

white, the patch of androconia ochreous, the termen tinged with fuscous.

♀. Hind wing without the fuscous tinge on tornal area.

Hab. Costa Rica, Juan Vinas (*Schaus*), 1 ♂, 1 ♀. *Exp.* ♂ 38, ♀ 42 millim.

415 *c*. Agylla subcinerea.

Agylla subcinerea, Schaus, A. M. N. H. (8) vii. p. 359 (1911).

Hind wing of male with small antemedial tuft of black hair below costa on upperside.

♂. Head, thorax, and abdomen grey suffused with fuscous; antennæ brownish; palpi brownish with blackish band at extremity of 2nd joint; pectus and legs brown, the fore tibiæ with blackish

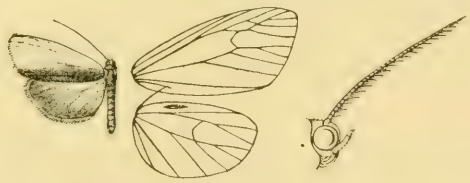

Fig. 128.—*Agylla subcinerea*, ♂. ½.

band at extremity. Fore wing white, the costal edge ochreous, black towards base, the inner area suffused with greyish fuscous. Hind wing white, the terminal area suffused with fuscous; cilia white. Underside of fore wing, the costal area of hind wing and terminal area to submedian fold fuscous.

♀. Pectus and legs ochreous white, the fore legs fuscous, the tarsi ringed with white, the ventral surface of abdomen white; fore wing with the costa white; hind wing with the fuscous suffusion

confined to apical area; underside of fore wing and costal area of hind wing paler, the latter without dark suffusion on terminal area.

Hab. Costa Rica, Juan Vinas (*Schaus*), 1 ♂, Tuis (*Schaus*), 1 ♀. *Exp.* ♂ 28, ♀ 30 millim.

*415*f*. **Agylla asra.** (Plate XXVIII. fig. 21.)

Agylla asra, Schaus, A. M. N. H. (8) vii. p. 358 (1911).

♂. Head, thorax, and abdomen grey suffused with reddish brown; pectus, legs, and ventral surface of abdomen brownish white; palpi and the fore legs above fuscous. Fore wing white suffused in parts with reddish brown, the inner area to the cell and vein 3 strongly suffused with reddish brown; the costal edge black towards base; a brown terminal line; cilia with a brown line near tips. Hind wing white suffused with reddish brown except the cell and inner area to towards termen. Underside of fore wing brown.

Hab. Costa Rica, Sixola R. (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 22 millim.

415*g*. **Agylla meteura,** n. sp.

Fore wing of male with the inner margin rather strongly arched towards tornus and clothed with upturned hair on underside; hind wing ample, the apex extending to well beyond tornus of fore wing.

Fig. 129.—*Agylla meteura*, ♂. ½.

♂. Head and thorax ochreous white suffused with red-brown; abdomen white, the anal tuft tinged with ochreous and the lateral tufts rufous. Fore wing ochreous white irrorated with red-brown scales, the inner area below submedian fold more suffused with red-brown; an obscure oblique red-brown shade from costa beyond middle to vein 4 and the termen more thickly irrorated with red-brown. Hind wing creamy white. Underside creamy white, the fore wing tinged with ochreous.

♀. Abdomen tinged with brown; fore wing less strongly irrorated with red-brown.

Hab. Colombia (*Fassl*), 2 ♀, San Antonio (*Palmer*), 1 ♂, 1 ♀ type. *Exp.* 38 millim.

417. **Agylla involuta**, insert (syn.) :—

Agylla albotestacea, Roths. Nov. Zool. xix. p. 227 (1912)

Brazil, Petropolis, type † ♂ in Coll. Rothschild.

*417 *a*. Agylla revoluta.

Agylla revoluta, Dogn. Hét. Nouv. Am. Sud, vii. p. 12 (1914).

Hind wing of male without patch of androconia.

♂. Head and thorax fuscous brown mixed with some grey; pectus and legs ochreous, the fore and mid tibiæ and tarsi brown;

Fig. 130.—*Agylla revoluta*, ♂. ½.

abdomen fuscous brown, the claspers white, the ventral surface whitish. Fore wing silvery white, the inner area suffused with brown; the costal edge fulvous yellow except towards base. Hind wing white, the costal half pale ochreous. Underside of fore wing reddish brown; hind wing with the costal area pale ochreous.

Hab. Colombia (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 30 millim.

417 *b*. Agylla delicia.

Agylla delicia, Schaus, Pr. U.S. Nat. Mus. xxix. p. 196 (1905).

Fore wing of male with the costal edge normal; hind wing with large patch of androconia in, below, and beyond end of cell.

♂. Head, thorax, and abdomen white tinged with fuscous; the

Fig. 131.—*Agylla delicia*, ♂. ½.

anal tuft ochreous, the lateral tufts fuscous. Fore wing white, the area below the cell and vein 3 suffused with brownish fuscous, rather deeper at inner margin. Hind wing white with large patch of fulvous yellow androconia in, beyond, and below end of cell.

♀. Fore wing with the area below vein 1 only tinged with pale fuscous; hind wing wholly white.

Hab. Fr. Guiana, St. Jean Maroni (*Schaus*), 1 ♀, type † ♂ in U.S. Nat. Mus. *Exp.* 26 millim.

417 *c*. **Agylla endoloba.**

Agylla endoloba, Hmpsn. A. M. N. H. (8) viii. p. 402 (1911).

Fore wing with the inner margin strongly curved and forming a lobe.

♂. Head and thorax white suffused with fuscous; antennæ tinged with fulvous; abdomen white slightly tinged with fuscous; pectus, legs, and ventral surface of abdomen ochreous white, the

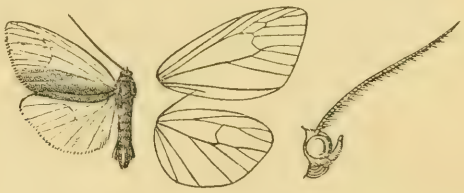

Fig. 132.—*Agylla endoloba*, ♂. ½.

fore legs brownish. Fore wing white, the inner half suffused with greyish fuscous, the costal edge tinged with fulvous yellow. Hind wing white. Underside of fore wing yellowish white with a large diffused brownish patch on tornal area.

♀. Fore wing with the inner area suffused with fuscous to submedian fold only.

Hab. Costa Rica, Guapiles (*Schaus*), 1 ♀; W. Colombia, Rio Dagua, Naranjito, 1 ♂ type. *Exp.* 34 millim.

419 *a*. **Agylla hampsoni.** (Plate XXVIII. fig. 22.)

Agylla hampsoni, Dogn. Ann. Soc. Ent. Belg. xlviii. p. 358 (1904).

♂. Head and thorax fuscous; antennæ fulvous; pectus yellowish; legs white and fuscous; abdomen yellowish white dorsally suffused with fuscous, the tufts at extremity fuscous. Fore wing silvery white; the costa ochreous, fuscous at base; the inner area fuscous to cell and vein 2. Hind wing yellowish white. Underside of fore wing fuscous, the costal area yellowish to beyond middle.

♀. Fore wing with the costal edge white, the inner area tinged with fuscous to submedian fold only; hind wing white.

Hab. Costa Rica, Juan Vinas (*Schaus*), 1 ♀; Panama, Chiriqui, 1 ♂; S.E. Peru, Carabaya, type † ♂ in Coll. Dognin. *Exp.* 40 millim.

419 *b*. **Agylla poasia.** (Plate XXVIII. fig. 23.)

Agylla poasia, Schaus, A. M. N. H. (8) vii. p. 360 (1911).

♂. Head, thorax, and abdomen grey tinged with fuscous; antennæ fulvous; palpi blackish at tips; pectus, legs, and ventral surface of abdomen brownish white, the fore legs suffused with fuscous. Fore wing silvery white, the area below submedian fold suffused with fuscous; the costal edge blackish towards base. Hind wing yellowish white. Underside of fore wing fuscous brown except the inner area.

♀. Hind wing white; the underside of fore wing white tinged with brown.

Hab. Costa Rica, Mt. Poas (*Schaus*), 1 ♂, 1 ♀. *Exp.* 36 millim.

419 *c*. **Agylla erigone.** (Plate XXVIII. fig. 24.)

Agylla erigone, Schaus, A. M. N. H. (8) vii. p. 358 (1911).

♂. Head, thorax, and abdomen grey suffused with fuscous brown; antennæ fulvous; pectus, legs, and ventral surface of abdomen white tinged with brown, the fore and mid legs fuscous above. Fore wing silvery white, the inner area to the cell and vein 2 fuscous brown; the costal edge orange-yellow, brown towards base; cilia brown. Hind wing silvery white, the cilia brownish at apex. Underside of fore wing orange-yellow with brownish streaks in cell, the terminal area brownish, running inwards to the cell above vein 2; hind wing with the veins of costal area and the apical area tinged with yellow.

♀. Underside of fore wing white tinged with fuscous brown except on apical half of costal area and beyond the cell; hind wing without yellow on costal area.

Hab. Costa Rica, Juan Vinas (*Schaus*), type † ♂ in U.S. Nat. Mus., Volcan de Turrialba (*Schaus*), Tuis (*Schaus*), 1 ♀. *Exp.* ♂ 42, ♀ 44 millim.

*419 *d*. **Agylla nigritia.** (Plate XXVIII. fig. 25.)

Agylla nigritia, Dogn. Hét. Nouv. Am. Sud, iii. p. 7 (1911).

♂. Head, thorax, and abdomen fuscous brown tinged with purplish grey; legs ochreous suffused with brown. Fore wing brown suffused with purplish grey, the costal edge with a slight ochreous tinge. Hind wing brown tinged with purplish grey, the discal area semihyaline white.

Hab. Colombia, Quindin, Tochesito, type † ♂ in Coll. Dognin. *Exp.* 32 millim.

422 *a*. **Agylla subvoluta.** (Plate XXVIII. fig. 26.)

Agylla subvoluta, Schaus, Pr. U.S. Nat. Mus. xxix. p. 196 (1905).

♂. Head, thorax, and abdomen pale fuscous; palpi yellowish at base; sides of frons and a bar between bases of antennæ white; pectus, legs, and ventral surface of abdomen white; lateral anal tufts pale ochreous. Fore wing white, the area below the cell and vein 3 suffused with fuscous, paler above submedian fold; the costal edge fuscous at base, then ochreous; cilia fuscous. Hind wing white slightly tinged with fuscous, the termen suffused with fuscous, more widely towards apex. Underside of fore wing fuscous with the costal area ochreous.

♀. Fore wing with the inner area suffused with pale fuscous below submedian fold only; cilia white; hind wing wholly white; underside of fore wing white with the terminal area slightly tinged with fuscous.

Hab. Fr. Guiana, Maroni R. (*Schaus*), 1 ♂, 1 ♀, type † ♂ in U.S. Nat. Mus. *Exp.* ♂ 32, ♀ 34 millim.

*423 *a*. **Agylla phæopasta.** (Plate XXVIII. fig. 27.)

Agylla phæopasta, Dogn. Ann. Soc. Ent. Belg. li. p. 225 (1907).

♂. Head, thorax, and abdomen fuscous mixed with some whitish; antennæ tinged with ochreous; pectus whitish; legs whitish tinged with fuscous and ochreous. Fore wing silvery white slightly tinged with fuscous; the inner area fuscous extending to cell and vein 2. Hind wing white, the costal area tinged with fuscous. Underside of fore wing fuscous brown; hind wing white with the costal area fuscous.

Hab. S.E. Peru, Carabaya, St. Domingo, type † ♂ in Coll. Dognin. *Exp.* 28 millim.

423 *b*. **Agylla endocapnia**, n. sp. (Plate XXVIII. fig. 28.)

Head and thorax fuscous; antennæ brown, white at base; pectus and legs white, the fore legs fuscous in front; abdomen white dorsally tinged with fuscous. Fore wing silvery white, the inner area below submedian fold suffused with deep fuscous. Hind wing white. Underside of fore wing white, the terminal area tinged with fuscous.

Hab. Peru, La Oroya (*Ockenden*), 1 ♂, 1 ♀ type. *Exp.* ♂ 38, ♀ 40 millim.

424. **Agylla auraria**, insert (syn.):—

Agylla rubrofasciata, Roths. Nov. Zool. xix. p. 226 (1912).

Peru, Carabaya, Oconeque (*Ockenden*), type † ♂, ♀ in Coll. Rothschild.

425 *a*. **Agylla sanguivitta.** (Plate XXVIII. fig. 29.)

Agylla sanguivitta, Hmpsn. A. M. N. H. (8) iv. p. 354 (1909).

Head and thorax fuscous; palpi blood-red, fuscous at tips; frons, antennæ, and patches on tegulæ and patagia blood-red; pectus whitish; head with slight white line behind; metathorax edged with white behind; legs fulvous, the fore tibiæ and tarsi with fuscous streak in front; abdomen ochreous, dorsally tinged with grey. Fore wing silvery white; a narrow orange-red fascia on costa; the inner area purplish fuscous except at base, with blood-red fascia above submedian fold from near base to beyond middle. Hind wing semihyaline white; the underside with ochreous fascia on costa.

Hab. S.E. Peru, Limbani (*Ockenden*), 1 ♂, 1 ♀ type, Aquilani (*Ockenden*), 2 ♂. *Exp.* ♂ 42, ♀ 46 millim.

*427 *a*. **Agylla ochritincta.** (Plate XXVIII. fig. 30.)

Agylla ochritincta, Dogn. Hét. Nouv. Am. Sud, vii. p. 11 (1914).

♂. Head yellowish, the antennæ fulvous, the palpi clothed with downturned hair in front, the 3rd joint fuscous; thorax reddish brown; pectus and legs ochreous, the fore and mid legs fuscous brown in front; abdomen ochreous yellow, dorsally whitish except at extremity. Fore wing ochreous yellow, the terminal area chalky white, the inner area slightly tinged with brown. Hind wing white tinged with ochreous. Underside of fore wing ochreous, the terminal area tinged with brown towards apex; hind wing ochreous, the inner area whitish.

Hab. Colombia, Cordoba (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 42 millim.

429 *a*. **Agylla ochrota.**

Agylla ochrota, Dogn. Hét. Nouv. Am. Sud, i. p. 6 (1910).

Hind wing of male with small patch of black androconia below costa on upperside. Head and thorax ochreous; palpi fuscous at

Fig. 133.—*Agylla ochrota*, ♂. ½.

tips; frons tinged with fuscous; abdomen whitish tinged with fuscous. Fore wing ochreous, the inner area slightly tinged with

brown. Hind wing ochreous white, the costal area tinged with fuscous. Underside of fore wing and costal half of hind wing suffused with fuscous.

Hab. Colombia, San Antonio (*Fassl*), 2 ♀. *Exp.* 24 millim. Type † ♂, ♀ in Coll. Dognin.

*429 *b*. **Agylla flavicornis.** (Plate XXVIII. fig. 31.)

Agylla flavicornis, Roths. Nov. Zool. xix. p. 227 (1912).

♂. Head black-brown, the vertex and antennæ orange-yellow, the palpi orange-yellow except at tips; tegulæ white, brown at tips and yellow dorsally; patagia orange-yellow, white at tips; dorsum of thorax black-brown; pectus, legs, and abdomen orange-yellow, the fore legs in front and extremities of femora of mid legs black-brown. Fore wing silvery white, the costal edge yellow, black-brown towards base; a narrow black-brown fascia with a greyish gloss on inner margin from near base to tornus. Hind wing white, the apex tinged with brown. Underside of fore wing suffused with brown, the costa orange-yellow except towards base, the inner area white; hind wing with the costa yellow.

Hab. Peru, R. Suambari, La Oroya (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 32 millim.

429 *c*. **Agylla steniptera.** (Plate XXVIII. fig. 32.)

Agylla steniptera, Hmpsn. A. M. N. H. (8) viii. p. 402 (1911).

♂. Head and thorax fuscous; palpi at base, antennæ, vertex of head, tegulæ except at tips and patagia ochreous; pectus, legs, and abdomen ochreous, the fore tibiæ and tarsi fuscous. Fore wing narrow, silvery white, a broad fuscous fascia on inner margin with some ochreous suffusion above it; the costal edge ochreous, fuscous at base. Hind wing ochreous white with some fuscous suffusion on termen from apex to vein 4. Underside of fore wing ochreous white, the terminal area fuscous extending as a wedge-shaped patch in cell nearly to base.

♀. Abdomen without black spot on anal segment.

Hab. W. Colombia, R. Dagua, Naranjito, 1 ♂ type, Rio Siato, Slopes of Choco, ♂, ♀ in Coll. Dognin.

*431 *a*. **Agylla sordida.** (Plate XXIX. fig. 1.)

Mintopola sordida, Roths. Nov. Zool. xix. p. 226 (1912).

♂. Head and thorax pale red-brown; pectus and legs yellowish white tinged with brown; abdomen yellowish white. Fore wing yellowish white, the inner area suffused with pale red-brown to submedian fold; a diffused oblique fuscous band from cell at origin of vein 2 to inner margin. Hind wing white. Underside of fore wing suffused with red-brown except the inner area.

♀. Fore wing sparsely irrorated with red-brown throughout and without the fuscous band, the underside entirely suffused with red-brown.

Hab. Colombia, Monte Tolima (*Fassl*), type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 36, ♀ 38 millim.

*432 *a*. **Agylla normalis.** (Plate XXIX. fig. 2.)

Agylla normalis, Dogn. Hét. Nouv. Am. Sud, vii. p. 12 (1914).

♂. Head white, the antennæ fulvous, the palpi fuscous brown; thorax pale reddish brown; pectus and legs ochreous, the fore and mid legs suffused with brown; abdomen brownish ochreous. Fore wing silvery white slightly tinged with brown, the area below the cell and vein 2 suffused with pale reddish brown; the costal edge fuscous brown towards base. Hind wing white slightly tinged with ochreous. Underside of fore wing and costal area of hind wing reddish brown.

Hab. Colombia, Bogotá (*Fassl*), type † ♂, ♀ in Coll. Dognin. *Exp.* 32 millim.

*432 *b*. **Agylla abrosa.** (Plate XXIX. fig. 3.)

Agylla abrosa, Schaus, A. M. N. H. (8) vii. p. 360 (1911).

♂. Head, thorax, and abdomen white suffused with pale red-brown; fore femora and tibiæ above darker brown; hind tibiæ and tarsi and ventral surface of abdomen white. Fore wing silvery white, the costal edge black towards base, the inner area pale red-brown below submedian fold. Hind wing ample, pure white. Underside of fore wing uniformly suffused with reddish brown; hind wing with the costal area slightly tinged with red-brown.

Hab. Costa Rica, Volcan de Turrialba (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 34 millim.

433. **Agylla corcovada**, insert (syn.):—

Agylla postimparilis, Roths. Nov. Zool. xix. p. 228 (1912).

Brazil, Petropolis, type † ♂, ♀ in Coll. Rothschild.

433 *a*. **Agylla sanctæ-johannis.** (Plate XXIX. fig. 4.)

Agylla sanctæ-johannis, Schaus, Pr. U.S. Nat. Mus. xxix. p. 197 (1905).

Palpi minute, not extending as far as frons.

♀. Head, thorax, and abdomen white tinged with fuscous, frons and ventral surface pure white. Fore wing white, the inner area tinged with fuscous below submedian fold. Hind wing and underside of fore wing pale fuscous.

Hab. Fr. Guiana, St. Jean Maroni (*Schaus*), 1 ♀, type † ♀ in U.S. Nat. Mus. *Exp.* 22 millim.

*438 *a*. **Agylla virilis.** (Plate XXIX. fig. 5.)

Agylla virilis, Roths. Nov. Zool. xx. p. 224 (1913).

♀. Pure white; frons and antennæ black; palpi black, yellow towards base; pectus and legs yellow, the fore and mid tibiæ and tarsi blackish in front. Fore wing with the costal edge blackish; an oblique glossy black postmedial band, its outer edge slightly excurved at vein 4; cilia blackish from apex to below vein 4. Hind wing with postmedial blackish spot between veins 4 and 2. Underside of fore wing with a faint ochreous tinge.

Hab. Formosa, Horisha, type † ♀ in Coll. Rothschild. *Exp.* 54 millim.

438 *b*. **Agylla alboluteola.** (Plate XXIX. fig. 6.)

Agylla alboluteola, Roths. Nov. Zool. xix. p. 226 (1912).

♂. Head black-brown with a bluish gloss, the vertex yellowish white, the palpi orange-yellow in front; thorax yellowish white; pectus, legs, and abdomen orange-yellow, the fore and mid tibiæ and the femoro-tibial joint of hind legs black-brown with a bluish gloss, the tarsi black-brown with a bluish gloss and ringed with yellow. Fore wing yellowish white, the costa narrowly black-brown with a bluish gloss; a black-brown postmedial band glossed with metallic blue, its inner edge oblique, its outer edge strongly excurved and somewhat angled at veins 6 and 4; cilia black-brown on apical half. Hind wing orange-yellow with a round dark brown subterminal spot from vein 5 to below 3. Underside of fore wing pale orange-yellow with the postmedial band dark brown and extending from below costa to submedian fold.

♀. Fore wing with the costal edge only black, the postmedial band expanding slightly below vein 4; hind wing without any yellow.

Hab. Assam, Khásis, type † ♂ in Coll. Rothschild; Selangor, Buket Kutu (*Holman-Hunt*), 1 ♂, 1 ♀. *Exp.* 48 millim.

*439 *a*. **Agylla idolon.** (Plate XXIX. fig. 7.)

Agylla idolon, Dyar, Pr. U.S. Nat. Mus. xlii. p. 50 (1912).

Head and tegulæ dull ochreous yellow; thorax and abdomen white, the legs and ventral surface of abdomen tinged with dull ochreous; wings white, the underside of fore wing grey.

Hab. Mexico, Mexico City (*Müller*). *Exp.* 27–30 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

439 *b*. **Agylla tecta.** (Plate XXIX. fig. 8.)

Ilema tecta, Wileman, Entom. xliii. p. 221 (1910).

Head and thorax white slightly tinged with brown especially on

dorsum of thorax; palpi black at tips; antennæ brown; fore legs black above, the mid and hind legs tinged with brown; abdomen white tinged with yellow towards extremity. Fore wing chalky white, the costal edge black towards base. Hind wing white with a faint brownish tinge. Underside of fore wing and costa of hind wing suffused with fuscous brown.

Hab. Formosa, Rantaizan (*Wileman*), 3 ♀. *Exp.* 42 millim. Type † ♂ in Coll. Wileman.

441 *a*. **Agylla holochrea.** (Plate XXIX. fig. 9.)

Agylla holochrea, Hmpsn. A. M. N. H. (7) viii. p. 182 (1901).

Pale ochreous yellow; palpi at tips, antennæ, stripes on femora, the tibiæ and tarsi fuscous. Underside of fore wing suffused with fuscous except marginal areas.

Hab. W. China, Chang-Yang (*Pratt*), 1 ♂, 2 ♀ type. *Exp.* ♂ 42, ♀ 48 millim.

441 *b*. **Agylla complanodes.** (Plate XXIX. fig. 10.)

Agylla complanodes, Hmpsn. A. M. N. H. (7) viii. p. 182 (1901).

♀. Head and tegulæ orange-yellow; thorax grey; pectus, legs, and abdomen orange-yellow. Fore wing grey with orange-yellow fasciæ on costa and inner margin. Hind wing orange-yellow.

Hab. Br. C. Africa, L. Nyasa (*De Jersey*), 1 ♀ type. *Exp.* 32 millim.

*445 *a*. **Agylla brunneipennis.** (Plate XXIX. fig. 11.)

Agylla brunneipennis, Dogn. Hét. Nouv. Am. Sud, vii. p. 11 (1914).

♂. Head, thorax, and abdomen red-brown, the last with the ventral surface reddish ochreous. Fore wing red-brown. Hind wing white tinged with ochreous; the underside with the costal area suffused with red-brown.

Hab. Colombia, Cordoba, Monte Tolima (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 38 millim.

Genus **PARAPALOSIA.**

Type.

Parapalosia, Dyar, Pr. U.S. Nat. Mus. xxix. p. 174 (1905) ... *cinderella*.

Proboscis fully developed; palpi porrect, not reaching beyond the frons; antennæ of male with bristles and cilia; tibiæ with the spurs moderate; abdomen of male with large lateral anal tufts. Fore wing with vein 3 from near angle of cell; 4, 5 stalked; 6 from below upper angle; 9, 10, 11 stalked, 9 from 10 anastomosing with 7, 8 to form the areole, 11 anastomosing with 12; male with the medial area of fore wing clothed with fuscous androconia on upper and undersides. Hind wing with vein 3 from close to angle of cell; 4, 5 stalked; 6, 7 stalked.

In key differs from *Palæosia* in the fore wing having vein 11 from the areole.

*445 *a*. Parapalosia cinderella.

Parapalosia cinderella, Schaus, Pr. U.S. Nat. Mus. xxix. p. 197 (1905).

♂. Head, thorax, and abdomen whitish tinged with fuscous, the lateral anal tufts blackish. Fore wing pale fuscous grey, the medial

Fig. 134.—*Parapalosia cinderella*, ♂. $\frac{1}{1}$.

area clothed with leaden fuscous scales. Hind wing whitish, the terminal area suffused with pale fuscous.

Hab. Fr. Guiana, St. Jean Maroni, type † ♂ in U.S. Nat. Mus. *Exp.* 20 millim.

*452 *a*. Areva albogrisea. (Plate XXIX. fig. 12.)

Areva albogrisea, Roths. Nov. Zool. xix. p. 228 (1912).

♀. Head, thorax, and abdomen pale brown, the vertex of head, tegulæ, and patagia white. Fore wing pale purplish brown, the inner half of basal area with some whitish suffusion; a whitish patch on costal area above end of cell, a short fascia beyond end of cell and slight streak above vein 6; a whitish band from lower end of cell to inner margin on which it emits a fascia to tornus; some whitish spots just before termen from below apex to vein 3. Hind wing pale purplish brown, whitish towards base. Underside of fore wing purple-brown with traces of a curved whitish band at end of cell and a whitish spot on termen below vein 4; hind wing with the inner area white except at termen.

Hab. Ecuador, S. Domingo de los Colorados (*Goodfellow*), type † ♀ in Coll. Rothschild. *Exp.* 30 millim.

453 *a*. Metareva flavescens.

Metareva flavescens, Dogn. Ann. Soc. Ent. Belg. xlvi. p. 230 (1902), ♂.
Metareva albescens, Dogn. Ann. Soc. Ent. Belg. xlvi. p. 230 (1902), ♀.
Agylla semidivisa, Roths. Nov. Zool. xix. p. 227 (1912).

Antennæ of male with bristles and cilia; underside of fore wing with the antemedial area and hind wing with the area from end of cell to termen clothed with rough androconia.

♂. Head, tegulæ, and outer part of patagia orange, vertex of head with fuscous patch; upper part of patagia and thorax fuscous; pectus, legs, and abdomen orange-yellow, fore tibiæ fuscous in front. Fore wing bright ochreous yellow, the costal edge orange; the inner area fuscous to below submedian fold and vein 2. Hind wing bright ochreous yellow. Underside of fore wing with a fuscous tinge on antemedial area and on terminal part of inner area; hind wing with a slight fuscous tinge from end of cell to termen.

Fig. 135.—*Metareva flavescens*, ♂. ¦.

♀. Outer edge of tegulæ and metathorax with some white; abdomen white dorsally tinged with ochreous; fore and hind wings white, the former with the inner area fuscous.

Hab. Argentina, Tucuman, 2 ♀. *Exp.* ♂ 38, ♀ 40 millim. Types † ♂, ♀ in Coll. Dognin, and type † ♂ *semidivisa* in Coll. Rothschild.

453 *b*. **Metareva endoscota.** (Plate XXIX. fig. 13.)

Metareva endoscota, Hmpsn. A. M. N. H. (8) iv. p. 354 (1909).

♀. Head and thorax white tinged with fuscous; abdomen white. Fore wing silvery white, the inner area tinged with fuscous below submedian fold. Hind wing pure white.

Hab. S.E. Peru, La Oroya (*Ockenden*), 1 ♀ type. *Exp.* 34 millim.

455 *a*. **Pasteosia orientalis.**

Pasteosia orientalis, Hmpsn. A. M. N. H. (8) iv. p. 354 (1909).

Fore wing with veins 7, 8, 9 stalked, 7 from beyond 9; 10 from cell.

♀. Head and thorax pale ochreous, the palpi blackish at base; abdomen grey-white, the ventral surface ochreous. Fore wing ochreous irrorated with fuscous brown; a minute black streak in middle of cell and two discoidal points; a curved diffused brownish

postmedial line; slight subterminal dark marks below vein 3 and in submedian interspace; a punctiform brown terminal line; cilia

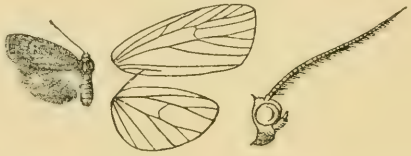

Fig. 136.—*Pasteosia orientalis*, ♀. ½.

whitish. Hind wing grey tinged with fuscous brown; the cilia whitish.

Hab. Singapore (*Ridley*), 1 ♀ type. *Exp.* 22 millim.

Genus **PARASHADA.**

Type.

Parashada, Hmpsn. A. M. N. H. (7) xv. p. 433 (1905) ..... *truncata.*

Proboscis fully developed; palpi porrect, not reaching beyond the rounded frontal prominence which has a small corneous plate below it; antennæ of male with cilia and bristles; tibiæ with the spurs moderate. Fore wing of male with large costal fold on underside fringed with hair; the neuration extremely distorted; vein 2 from middle of cell, after vein 3 the median nervure is curved upwards and backwards to the lower edge of the very large areole before its extremity from which arises veins 4, 5; 6 from areole; 7, 8, 9 stalked, 7 from beyond 9; 10, 11 from areole. Hind wing broad, the costal area highly arched; the cell very narrow; vein 2 from before middle; 3, 4 shortly stalked, 3 becoming coincident with 2 before termen; 5 absent; 6, 7 coincident; 8 much curved.

In key differs from *Œdaleosia* in the hind wing having veins 6, 7 coincident.

457 *a*. **Parashada truncata.**

Parashada truncata, Hmpsn. A. M. N. H. (7) xv. p. 434 (1905).

♂. Head and thorax orange-yellow; abdomen fuscous brown, the ventral surface orange-yellow. Fore wing dull reddish brown.

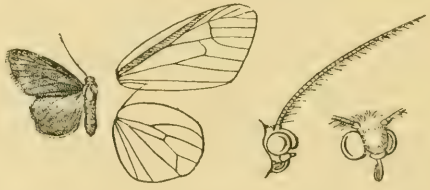

Fig. 137.—*Parashada truncata*, ♂. ½.

Hind wing with the costal half pale yellow, the inner half dull brown.

Hab. Sula Mangoli (*Doherty*), 1 ♂ type. *Exp.* 24 millim.

Genus **HYPOSHADA**.

Type.
Hyposhada, Hmpsn. A. M. N. H. (8) iv. p. 352 (1909) ..... *pellopis*.

Proboscis fully developed; palpi porrect, not reaching beyond the frons which is rounded; antennæ of male with long cilia; hind tibiæ with two pairs of spurs. Fore wing long and narrow, the termen obliquely curved; the subcostal and median nervures closely approximated to middle; vein 2 oblique, joined at middle by a spur curving upwards from vein 1 *b*; 3, 4, 5 from angle of cell; 6, 7 stalked from 9, 8 absent; 10 from angle; 11 from cell, free; a fringe of hair from basal half of costa on underside; the base of inner margin fringed with hair. Hind wing very ample; the cell very long; vein 2 from well before middle becoming coincident with 4; 3 from well before angle of cell becoming coincident with 4; 4, 5 from angle, the former very oblique; a recurrent vein in cell; 6, 7 on a long stalk, rather distorted; 8 free, curving upwards to costa near base.

In key differs from *Disoidemata* in the fore wing having vein 8 absent; hind wing with veins 4, 5 from cell.

*457 *b*. **Hyposhada pellopis**.

Scoliacma pellopis, Beth.-Baker, Nov. Zool. xv. p. 193 (1908).

♂. Head and thorax red-brown; pectus and legs pale rufous;

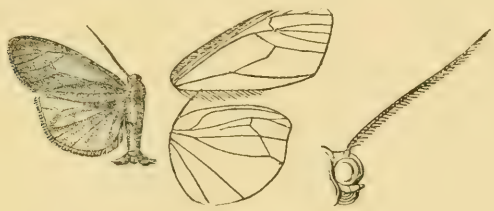

Fig. 138.—*Hyposhada pellopis*, ♂. ½.

abdomen grey at base, the terminal half and ventral surface pale rufous. Fore wing red-brown, the inner margin yellowish. Hind wing white tinged with ochreous.

Hab. Br. N. Guinea, Owgarra (*Meek*), type † ♂ in Coll. Bethune-Baker. *Exp.* 38 millim.

461. **Lithosia quadra**, insert:—

Œonistis quadra ab. *confluens*, Dumont, Ann. Soc. Ent. Fr. 1903, p. 406, pl. v. f. 6.

♀. Fore wing with the two spots conjoined by a narrow band angled outwards below costa, then oblique.

Genus **ARDONISSA**.

Type.
Ardonissa, Dogn. Ann. Soc. Ent. Belg. li. p. 226 (1907) ..... *adscitina*.

Proboscis fully developed; palpi porrect, short, clothed with long hair; antennæ of male minutely serrate and ciliated; hind tibiæ with two pairs of

short spurs. Fore wing rather narrow; vein 2 from towards angle of cell; 3, 4 from angle; 5 from just above angle; 6 from upper angle; 7, 8 stalked, 9 absent; 10, 11 from cell, 11 anastomosing with 12. Hind wing with vein 2 from well before angle of cell; 3 from angle; 4 absent; 5 from middle of discocellulars; 6, 7 shortly stalked; 8 from middle of cell.

In key differs from *Urozana* in the hind tibiæ having the medial spurs present.

*464 *a*. Ardonissa adscitina.

Ardonissa adscitina, Dogn. Ann. Soc. Ent. Belg. li. p. 226 (1907).

♂. Head, thorax, and abdomen black with a deep metallic blue-green gloss; wings uniform deep metallic blue-green.

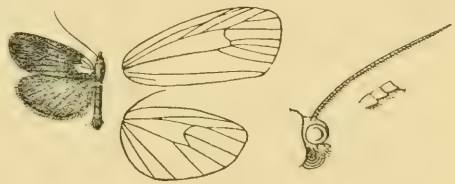

Fig. 139.—*Ardonissa adscitina*, ♂. ½.

Hab. Peru, Cuzco, type † ♂ in Coll. Dognin. *Exp.* 26 millim.

Genus **ARDONEA**, insert:—

	Type.
Trichearias, Dogn. Ann. Soc Ent. Belg. xlix. p. 90 (1905).....	*nigella*.

465. **Ardonea morio**, insert (syn.):—

Scepsis unicolor, Feld. Reis. Nov. pl. 139. f. 11 (1874); Kirby, Cat. Het. p. 175.

*465 *a*. Ardonea judaphila. (Plate XXIX. fig. 14.)

Ardonea judaphila, Schaus, Pr. U.S. Nat. Mus. xxix. p. 197 (1905).

♂. Head black-brown, scarlet behind; thorax scarlet; pectus, legs, and abdomen black-brown with a bluish tinge. Fore wing black-brown with a scarlet patch at base; the terminal area paler except at costa, with slight dark streaks in the interspaces. Hind wing fuscous brown, rather thinly scaled.

Hab. Fr. Guiana, St. Jean Maroni, type † ♂ in U.S. Nat. Mus. *Exp.* 22 millim.

466. Ardonea tenebrosa.

Antennæ of male with cilia and bristles, the medial part of shaft fringed with long hair above; abdomen clothed with rough hair; hind wing produced to a large pointed lobe at tornus.

♂. Tegulæ with yellowish white patches; patagia yellowish white edged with black-brown; abdomen with the anal tuft crimson; fore wing with more yellowish white and less black-brown suffusion;

Fig. 140.—*Ardonea tenebrosa*, ♂. $\frac{1}{1}$.

hind wing semihyaline white, the apex brown, a narrow brown terminal band.

Subsp. 1. *peculiaris*, Druce, A. M. N. H. (7) xviii. p. 86 (1906).

Hind wing with the costal and terminal areas broadly suffused with fuscous.

Hab. Peru, Huacamayo, type † ♂ in Coll. Joicey. *Exp.* 32 millim.

*466 *a*. Ardonea nigella.

Trichearias nigella, Dogn. Ann. Soc. Ent. Belg. xlix. p. 90 (1905).

Antennæ of male ciliated; abdomen with paired lateral tufts of long hair from 5th segment; hind wing with the tornus very slightly lobed.

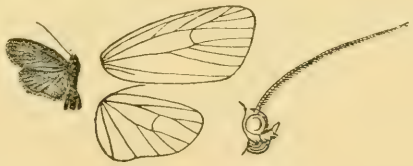

Fig. 141.—*Ardonea nigella*, ♂. $\frac{1}{1}$.

♂. Uniform fuscous brown shot with cupreous purple; abdomen with the lateral tufts red-brown.

Hab. Ecuador, Loja, type † ♂ in Coll. Dognin. *Exp.* 20 millim.

*473 *a*. Palæosia longistria.

Palæosia longistria, Beth.-Baker, Nov. Zool. xv. p. 194 (1908), ♂.
Palæosia grandis, Beth.-Baker, Nov. Zool. xv. p. 194 (1908), ♀.
Calamidia reticulata, Roths. Nov. Zool. xix. p. 224 (1912).
Palæosia plagiata, Roths. Nov. Zool. xix. p. 228 (1912).

Palpi upturned to about vertex of head; antennæ of male bipectinate with moderate branches, the apex serrate.

♂. Head whitish tinged with yellow; palpi, side of frons, and antennæ brown; thorax yellow tinged with rufous on dorsum; tibiæ and tarsi brownish, the latter with pale rings; abdomen white tinged with yellow. Fore wing yellow, the cell and basal half of inner area mottled with red-brown, the former with a faint silvery blue gloss; a small blackish spot above vein 2 below end of cell. Hind wing pale yellow.

♀. Thorax mottled with dark red-brown; fore wing thickly mottled with red-brown and irrorated with some silvery blue scales

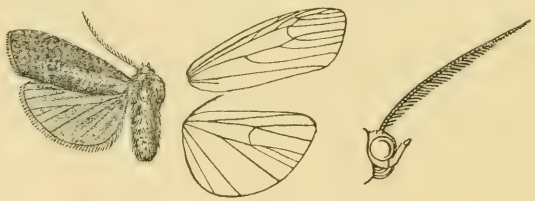

Fig. 142.—*Palæosia longistria*, ♂. $\frac{1}{1}$.

especially in cell; a diffused white fascia below the cell to the large quadrate black spot below end of cell.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♂ *plagiata* in Coll. Rothschild; Br. N. Guinea, Mt. Kebea (*Pratt*), type † ♀ *grandis* in Coll. Bethune-Baker, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Bethune-Baker, and type † ♂ *reticulata* in Coll. Rothschild, Angabunga R. (*Meek*). *Exp.* ♂ 42, ♀ 52 millim.

Page 230. Genus **EURYPTIDIA**, insert:—

	Type.
Paratype, Feld. Reis. Nov. p. 8 (1874), non descr.....	*trifera*.

479. **Euryptidia trifera**, insert (syn.):—

Paratype læticolor, Feld. Reis. Nov. pl. 104. f. 11 (1874); Kirby, Cat. Het. p. 399.

*484 *a*. Josiodes suapurensis. (Plate XXIX. fig. 15.)

Josiodes suapurensis, Roths. Nov. Zool. xix. p. 229 (1912).

♂. Head black; thorax orange; abdomen black-brown with some orange at sides at base; pectus, legs and ventral surface of

abdomen black-brown glossed with blue, the last with slight orange lines on two medial segments. Fore wing orange, the costa and inner margin except at base narrowly black; the terminal area black, broadly at costa, narrowing to tornus, with an oblique orange subapical bar from below costa to vein 4. Hind wing orange; a rather diffused blackish brown streak in upper part of cell from near base to near extremity; the terminal area black, broad at costa on which the black runs inwards, its inner edge somewhat angled inwards towards upper angle of cell, then narrowing at middle and running inwards as a wedge-shaped patch below submedian fold to towards base; the underside with the costa black to near base and the upper part of cell black towards base.

♀. Abdomen orange with dorsal black fascia and the extremity black, the ventral surface black with orange lines on two medial segments; fore wing with the inner margin not black; hind wing without the blackish streak in cell, the terminal area more narrowly black towards apex and only slightly expanding in submedian interspace, the underside with the costa narrowly black to before middle.

Hab. Venezuela, Suapures (*Klages*), type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 32, ♀ 38 millim.

*484 *b*. **Josiodes intensa.** (Plate XXIX. fig. 16.)

Josiodes suapurensis, intensus, Roths. Nov. Zool. xix. p. 229 (1912).

♀. Head and thorax black with a few orange scales; abdomen orange with dorsal black fascia and the extremity black. Fore wing orange; the costa black; the terminal area black, broadly at costa, narrowing to tornus and emitting a short fascia on inner margin; an oblique orange subapical bar from below costa to vein 4. Hind wing orange; the terminal area black, expanding somewhat to costa and narrowing at middle.

Hab. Surinam, Saramacca R. (*Ellacombe*), type † ♀ in Coll. Rothschild. *Exp.* 40 millim.

485 *a*. **Josiodes nigrobasalis.** (Plate XXIX. fig. 17.)

Josiodes nigrobasalis, Roths. Nov. Zool. xix. p. 229 (1912).

♀. Head and thorax black; abdomen black; orange at sides except towards extremity. Fore wing with the basal area black, its outer edge angled outwards below costa, then indented by a wedge-shaped streak from the orange postmedial area in the cell where it extends almost to the base, then oblique and slightly indented at submedian fold and vein 1; slight orange marks at base below the cell and on inner margin; the postmedial area broadly orange; the terminal area black, broad at costa, narrowing to a point at tornus, with an oblique orange subapical bar from below costa to vein 4, irrorated with a few black scales. Hind wing black; the inner area narrowly orange; a small orange spot beyond

lower angle of cell. Underside of fore wing with the black area slightly indented in cell and with no orange at base; hind wing with large orange spot in, below and beyond lower angle of cell.

Ab. 1. Fore wing with the whole basal area black, its outer edge incurved in the cell, then excurved.

♂. Fore wing with the black on basal inner area reduced, no orange subapical bar; hind wing orange, the terminal area black with irregular inner edge running up in submedian interspace to the base.

Hab. Br. Guiana, Georgetown, 1 ♂, 1 ♀, Kotaro, type † ♀ in Coll. Rothschild. *Exp.* ♂ 34, ♀ 46 millim.

501. **Josiodes batesi**, insert (syn.):—

Josiodes quadrifascia, Roths. Nov. Zool. xix. p. 229 (1912).

Panama, Chiriqui, type † ♀ in Coll. Rothschild.

Genus **MARSYPOPHORA**.

Type.

Marsypophora, Feld. Reis. Nov. p. 6 (1875), non descr. ..... *erycinoides.*

Proboscis fully developed; palpi downcurved, extending to well beyond the frons and fringed with rather long hair; frons smooth; eyes large, round; antennæ of male with the basal half bipectinate with short branches, the apical half ciliated; hind tibiæ with the medial spurs absent. Fore wing broad, the apex produced, the termen obliquely curved; vein 3 from before angle of cell; 4, 5 from angle; 6 from upper angle; 7, 8, 9, 10, 11 stalked; 11 from just beyond 7; the underside of male with small patch of androconia above middle of vein 1. Hind wing of male small, the upperside with patch of downcurved hair in cell and fold and fringe of hair below the cell; the underside with large glandular swelling in end of cell; veins 3 and 5 from angle, 4 absent; 6, 7 from upper angle; 8 from middle of cell, sinuous and approximated to 7.

In key differs from *Æolosia* in the hind tibiæ having the medial spurs absent; fore wing with vein 11 stalked with 7, 8, 9, 10; hind wing with vein 4 absent.

*502 *a*. **Marsypophora erycinoides.**

Marsypophora erycinoides, Feld. Reis. Nov. pl. 105. f. 28 (1875); Kirby, Cat. Het. p. 404.

♂. Head, thorax, and abdomen black-brown, the last with the

Fig. 143.—*Marsypophora erycinoides*, ♂. ½.

ventral surface white. Fore wing black-brown with large elliptical

orange patch extending from near base to well beyond the cell and from below costa to well below the cell. Hind wing pale yellow; the submedian interspace irrorated with black-brown; the terminal area black-brown from below apex to tornus with curved inner edge; the underside yellow with black-brown terminal band extending below the costa on to the lower part of the swelling.

Hab. Colombia, Bogota, type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

*502 *b*. **Marsypophora dissimilipennis.** (Plate XXIX. fig. 18.)

Marsypophora dissimilipennis, Dogn. Le Nat. (2) vi. p. 123 (1892); id. Lep. Loja, p. 89, pl. 9. f. 11.

♂. Head, thorax, and abdomen black, the last with the ventral surface whitish. Fore wing orange, the marginal areas black expanding widely on apical and tornal areas. Hind wing black, the costal half whitish, the fringe of hair in and below the cell yellow.

Hab. Ecuador, Loja, type † ♂ in Coll. Dognin. *Exp.* 26 millim.

*503 *a*. **Ptychoglene coccinea.**

Lycomorpha coccinea, H. Edw. Ent. Am. 2, p. 9 (1886); Dyar, Cat. Lep. N. Am. p. 81.

♀. Head and thorax crimson; antennæ and palpi at tips black; legs brownish tinged with crimson; abdomen black, the base crimson. Fore wing with the basal two-thirds crimson, the terminal area blue-black with strongly dentate inner edge. Hind wing with the basal half crimson, the terminal half blue-black with strongly dentate inner edge.

Hab. U.S.A., Arizona. *Exp.* 24 millim. This species is unknown to me.

506. **Ptychoglene æqualis,** insert (syn.):—

Ptychoglene hæmatodes, Dyar, Pomona Journ. Ent. iv. p. 746 (1912).

Mexico, Cuernavaca (*Crawford*), Popocatepetl (*Schaus*), Salazar (*Schaus*).

508 *a*. **Ptychoglene stenodora.** (Plate XXIX. fig. 19.)

Ptychoglene stenodora, Dyar, Proc. U.S. Nat. Mus. xliv. p. 284 (1913).

Head, thorax, and abdomen black with a bluish gloss. Fore wing black with a slight bluish gloss; a crimson patch extending from close to the base to towards apex and from below the costa to just below median nervure, its outer edge oblique. Hind wing black with a crimson patch from base to near apex and from costa to just below median nervure, its outer edge obliquely curved and its outer and lower edges somewhat diffused, the costal edge black towards

its extremity. Underside of fore wing with the crimson extending to vein 1 towards base, then to submedian fold.

Hab. Mexico, Tehuacan (*Müller*), 1 ♂, 1 ♀. *Exp.* 28 millim.

513. **Cisthene menea**, insert (syn.) :—

Ruscino arida, Skinner, Ent. News, Philad. xvii. p. 95 (1906).

U.S.A., Arizona, Cochise Co., San Bernardino Ranch.

Cisthene major, Roths. Nov. Zool. xix. p. 230 (1912).

Hab. ign., type † ♀ in Coll. Rothschild.

Larva. Dyar, Proc. Ent. Soc. Wash. xiii. p. 229 (1911).

Pale yellow; four or five irregular partly confused crimson bands on each somite, the broadest at the incisures and all irregularly confluent on subventral area; ventral surface pale tinged with crimson; warts small with very long spreading curved pale yellow hairs; a wart above the stigmatal wart on somites ii. iii. and wart i. of the abdominal somites two-haired; wart iv. single haired, placed directly above the spiracle; head pale reddish brown, the sutures paler.

519 *a*. **Cisthene argentinensis.** (Plate XXIX. fig. 20.)

Cisthene argentinensis, Roths. Nov. Zool. xix. p. 230 (1912).

Head and thorax black-brown; tegulæ yellow; abdomen yellow, black-brown at base and extremity and with dorsal series of black-brown spots, a ventral series of black-brown patches, small towards base, confluent and covering the whole surface towards extremity. Fore wing black-brown; a slightly curved pale yellow medial band with sinuous edges, expanding somewhat from below costa to median nervure; a curved subapical yellow bar from below costa to below vein 5 and a triangular subterminal patch between veins 3 and 1. Hind wing yellow; the base black-brown from middle of costa to inner margin near base; the terminal area black-brown, its inner edge incurved from below vein 3 to vein 1. Underside of fore wing with the outer edge of the band excurved at middle, the subapical bar broader.

Ab. 1. Hind wing with the black extending to middle of wing, emitting a streak below costa to near the terminal band and in submedian interspace extending to the terminal band.

Hab. Argentina, Tucuman (*Steinbach*), Salta (*Steinbach*), type † ♀ in Coll. Rothschild, Rioja (*Giacomelli*), 1 ♂. *Exp.* ♂ 36, ♀ 30 millim.

521 *a*. **Cisthene triplaga.** (Plate XXIX. fig. 21.)

Cisthene triplaga, Hmpsn. A. M. N. H. (7) xv. p. 434 (1905).

Black; tegulæ orange; abdomen with subdorsal orange patches on 2nd segment and lateral and ventral stripes except on terminal

segment. Fore wing with rather broad orange fascia on median nervure, expanding somewhat at lower angle of cell and with its lower edge somewhat diffused; a curved subterminal series of three spots. Hind wing with broad orange fascia in and below the cell from base to well beyond cell.

Hab. Paraguay, Sapucay (*Foster*), 2 ♂, 1 ♀ type. *Exp.* 30 millim.

Genus **PSEUDLEPISTA.**

Pseudlepista, Hmpsn. P. Z. S. 1910, p. 392 ..... Type. *atrizona*.

Proboscis fully developed; palpi porrect, short, not reaching as far as the large rounded frontal prominence; antennæ of male bipectinate with very short branches, of female typically very minutely serrate; fore tibiæ very short, with short outwardly curved claw on outer side at extremity. Fore wing with vein 2 from towards angle of cell, straight; 3. 4 stalked; 5 absent; 6 from upper angle; 7, 8, 9 stalked, 7 from before 9; 10, 11 typically stalked or from a point, 11 bent upwards and touching 12. Hind wing with vein 2 from towards angle of cell; 3, 4 strongly stalked; 5 absent; 6, 7 stalked; 8 from middle of cell.

In key differs from *Phryganopsis* in the fore tibiæ being short with a claw at extremity.

521 *b*. **Pseudlepista atrizona.**

Pseudlepista atrizona, Hmpsn. P. Z. S. 1910, p. 392, pl. xxxvi. f. 7.

Head orange, the palpi, sides of frons, and antennæ black; thorax black, the tegulæ with some orange on edges, the patagia orange with black upper edge; coxæ and fore femora at extremities with

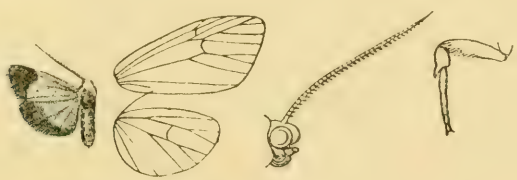

Fig. 144.—*Pseudlepista atrizona*, ♂. ½.

some orange; abdomen orange, dorsally black at base. Fore wing orange with broad black terminal band expanding into a large rounded patch on apical area. Hind wing orange with black terminal band, broad at costa, narrowing to a point at tornus.

Hab. N.E. Rhodesia, Serenji Distr. (*Neave*), 1 ♂, 1 ♀ type. *Exp.* 22 millim.

521 *c*. **Pseudlepista flavicosta.**

Pseudlepista flavicosta, Hmpsn. P. Z. S. 1910, p. 392, pl. xxxvi. f. 8.

Antennæ of female ciliated; fore wing with vein 11 well separated from 10 and anastomosing with 12.

♀. Head and thorax orange, the metathorax with a whitish patch; palpi with the 3rd joint black; fore legs, mid tibiæ and tarsi and hind tibiæ at extremity and tarsi brown above; abdomen pale yellow. Fore wing very pale yellow, the inner area more

Fig. 145.—*Pseudlepista flavicosta*, ♀. ½.

ochreous, the costal edge orange. Hind wing very pale yellow. Underside of fore wing and costal area of hind wing more orange, the disk of fore wing tinged with fuscous.

Hab. Congo, Katanga Distr. (*Neave*), 1 ♀ type. *Exp.* 34 millim.

522 *a*. **Aglossosia latifusca.** (Plate XXIX. fig. 22.)

Aglossosia latifusca, Hmpsn. A. M. N. H. (7) xix. p. 232 (1907).

♂. Head and thorax deep orange; antennæ blackish, the shaft whitish above; palpi fuscous above; legs striped with fuscous; abdomen orange with black dorsal stripe and segmental bands except at base. Fore wing fuscous; a yellow fascia on costa narrowing to a point before apex; a yellow fascia on inner margin; cilia yellow. Hind wing pale yellow, the costal area suffused with fuscous or suffused irregularly with fuscous to submedian fold leaving the inner area and termen yellow. Underside of both wings with slight dark discoidal spot.

Hab. Uganda, Ketoma, 5000′ (*Doggett*), 2 ♂ type. *Exp.* 40 millim.

522 *b*. **Aglossosia deceptans**, n. sp. (Plate XXIX. fig. 23.)

Head, tegulæ, and patagia fulvous yellow; dorsum of thorax grey; antennæ fuscous except towards base; pectus and legs fulvous, the fore and mid tibiæ in front and the tarsi dark brown; abdomen fulvous yellow with obscure dark bands, distinct on ventral surface and in female. Fore wing silvery white tinged with grey, the costa fulvous yellow with white below it, the inner margin, termen and cilia fulvous yellow. Hind wing yellowish white, the costal area suffused with grey. Underside of fore wing fuscous, the costa and termen fulvous yellow; hind wing with the costal area fuscous.

Hab. Congo, S.E. Katanga (*Neave*), 1 ♀; Br. E. Africa, S. Kavirondo (*Neave*), 1 ♂ type. *Exp.* 32 millim.

523 *a*. **Caripodia fuscicincta**, n. sp. (Plate XXIX. fig. 24.)

♂. Head, thorax, and abdomen orange-yellow; frons with blackish patch above; prothorax with blackish patch; antennæ, palpi, and tarsi black. Fore wing orange-yellow; the costal edge black; a broad fuscous terminal band; cilia fuscous at base, orange-yellow at tips. Hind wing orange-yellow; a broad fuscous terminal band with rather diffused inner edge; cilia fuscous. Underside of fore wing with the fuscous diffused inwards in lower part of cell and below the cell to middle.

Hab. Br. E. Africa, N. Kavirondo, Nasisi Hills (*Neave*), 1 ♂ type. *Exp.* 30 millim.

523 *b*. **Caripodia albescens.** (Plate XXIX. fig. 25.)

Caripodia albescens, Hmpsn. A. M. N. H. (7) xix. p. 232 (1907).

♀. Head orange-yellow; thorax and abdomen whitish tinged with yellow; pectus, legs, and ventral surface of abdomen orange-yellow. Fore wing white tinged with yellow on costa and inner margin. Hind wing white tinged with yellow. Underside suffused with orange-yellow.

Hab. Sierra Leone (*Dudgeon*), 3 ♀; Nigeria (*Capt. Richardson*), 1 ♀ type. *Exp.* 30 millim.

523 *c*. **Caripodia persimilis**, n. sp. (Plate XXIX. fig. 26.)

Hind tibiæ with two pairs of spurs; fore wing with vein 7 from 8 after 9.

♀. Head and thorax fulvous yellow; fore and mid tibiæ in front and the tarsi black-brown; abdomen black-brown, the base and extremity fulvous yellow. Fore wing silvery white tinged with grey, the costa and cilia fulvous yellow. Hind wing silvery white tinged with grey, the costal area suffused with fuscous; cilia fulvous yellow. Underside of fore wing fuscous, the costal, inner and terminal areas fulvous yellow; hind wing fuscous, the costa and terminal area fulvous yellow, the inner area whitish tinged with yellow.

Hab. Br. E. Africa, Nairobi (*Milne*), 1 ♀ type. *Exp.* 32 millim.

528. **Onychipodia nigricostata**, insert (syn.) :—

Onychipodia bimarginata, Roths. Nov. Zool. xix. p. 230 (1912).

Br. E. Africa, Nairobi (*Jackson*), type † ♀ in Coll. Rothschild. The hind tibiæ have two pairs of spurs in this genus.

*528 *a*. **Onychipodia flavithorax.** (Plate XXIX. fig. 27.)

Onychipodia flavithorax, Roths. Nov. Zool. xix. p. 230 (1912).

♀. Head, tegulæ, and patagia orange; antennæ dark brown except at base; dorsum of thorax pale brown; fore and mid

tibiæ in front and the tarsi dark brown, the pectus, femora, and hind tibiæ orange-yellow; abdomen dark brown with orange-yellow segmental lines. Fore wing pale silvery grey, the costal edge orange-yellow; cilia pale yellow. Hind wing pale yellow. Underside of fore wing brown, the costal area and termen narrowly orange-yellow; hind wing with the costal area suffused with brown.

Hab. Angola, Cubal R. (*Penrice*), type † ♀ in Coll. Rothschild. *Exp.* 40 millim.

528 *b*. **Onychipodia straminea**, n. sp. (Plate XXIX. fig. 28.)

Head and thorax ochreous; tegulæ fiery red at tips; pectus and legs tinged with brown, the tarsi brown ringed with ochreous; abdomen ochreous, banded with brown except towards base. Fore wing uniform glossy ochreous. Hind wing rather paler ochreous. Underside of fore wing fuscous, the costa to beyond middle and the termen ochreous.

Hab. Uganda, S.E. Ankole (*Neave*), 6 ♂, 5 ♀ type. *Exp.* 40 millim.

Genus **ANAPHOSIA**.

	Type.
Anaphosia, Hmpsn. A. M. N. H. (7) xi. p. 344 (1903)	*cyanogramma*.

Proboscis fully developed; palpi porrect, not reaching beyond the rounded frontal prominence; antennæ of male typically ciliated; tibiæ with the spurs moderate; the fore tibiæ with long curved claw on inner side and short claw on outer. Fore wing long and narrow; vein 2 from middle of cell; 3 from well before angle; 4, 5 from angle; 6 from upper angle; 9 from 10 anastomosing with 8 to form the areole; 11 free. Hind wing with vein 2 from middle of cell; 3, 4, 5 from angle; 6, 7 shortly stalked.

In key differs from *Cyptonychia* in the fore tibiæ having a short claw on outer side.

528 *c*. **Anaphosia pectinata**.

Anaphosia pectinata, Hmpsn. P. Z. S. 1910, p. 393, pl. xxxvi. f. 31.

Antennæ of male bipectinate with short branches ending in a bristle, of female serrate.

Head, thorax, and abdomen orange; sides of frons with black patches; antennæ black; fore and mid tibiæ above and the tarsi black. Fore wing yellow, the costa and inner margin except at base narrowly black; a black medial line, excurved from costa to middle of cell, then oblique and slightly sinuous; a black postmedial line, slightly excurved below costa, then oblique and slightly excurved in submedian interspace, a black streak from it in discal fold bent upwards to costa before apex, its angle connected or nearly connected with the termen and with an oblique black streak from postmedial line to termen below vein 4, a terminal black line; cilia black at base, yellowish at tips. Hind wing orange with narrow

black terminal band, its inner edge somewhat diffused inwards between veins 6 and 3.

Hab. Congo, Kambove Distr. (*Neave*), 2 ♂, 1 ♀ type. *Exp.* 36–38 millim.

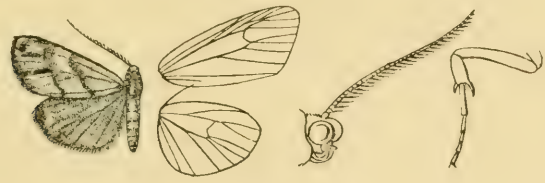

Fig. 146.—*Anaphosia pectinata*, ♂. ½.

528 *d*. Anaphosia eurygrapha.

Anaphosia eurygrapha, Hmpsn. P. Z. S. 1910, p. 394, pl. xxxvi. f. 32.

♂. Head, tegulæ, and patagia pale yellow; frons with black bands; antennæ brown; neck black; dorsum of thorax dark brown; fore femora at extremities, fore and mid tibiæ, hind tibiæ at extremities, and the tarsi dark brown; abdomen dorsally dark brown, ventrally orange. Fore wing yellowish white; the costa and inner margin except at base black; a narrow medial black band, oblique below median nervure and connected by a streak on median nervure with the narrow black postmedial band which is slightly excurved below the costa, then oblique and slightly excurved in submedian interspace, with a black fascia from it in discal fold bent upwards to costa before apex, its angle expanding into a patch to near termen, an oblique black fascia from postmedial line to termen below vein 4; termen and cilia black. Hind wing orange; a broad terminal black band narrowing to tornus and with a blackish line just before its inner edge between vein 6 and submedian fold; the underside with narrow black terminal line.

Hab. N.E. Rhodesia, Serenji Distr. (*Neave*), 1 ♂ type. *Exp.* 36 millim.

*528 *e*. Anaphosia mirabilis.

Teracotona mirabilis, Bartel, Iris, xvi. p. 204 (1903).

♂. Head and thorax black with the tegulæ and patagia yellowish; abdomen yellow with dorsal series of black bands. Fore wing black with yellowish patches; a large patch on basal area from below costa to above inner margin, its outer edge excurved in the cell and leaving a narrow black band before a broad yellowish band just beyond the cell from below costa to above inner margin, oblique except towards costa and with sinuous edges; a small subterminal spot below costa with small subapical spot beyond it and quadrate

subterminal patches at and below the middle. Hind wing yellow, the costal and terminal areas black, the latter with diffused irregular inner edge.

Hab. E. Africa, ? L. Nyassa. *Exp.* 36 millim. This species is unknown to me.

528 *f*. Anaphosia cyanogramma.

Anaphosia cyanogramma, Hmpsn. A. M. N. H. (7) xi. p. 344 (1903).

Antennæ of male ciliated.

Head, tegulæ, patagia, and abdomen orange-yellow; antennæ, tibiæ, and tarsi brown; thorax blue-black above. Fore wing pale yellow; markings black shot with metallic blue; a costal fascia tapering to apex; a fascia on inner margin from near base to tornus, tapering at extremities; a slightly curved medial line; a postmedial line

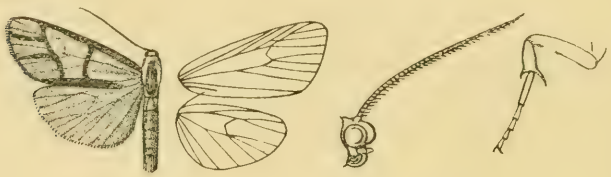

Fig. 147.—*Anaphosia cyanogramma*, ♂. ½.

oblique from costa to just beyond lower angle of cell, then slightly incurved and giving off below vein 6 a fascia curved upwards to termen, and below vein 4 an oblique fascia; cilia blue-black. Hind wing pale yellow.

Hab. Congo, S.E. Katanga (*Neave*), 1 ♀; Mashonaland, Mpodzi R. (*Marshall*), 1 ♂ type. *Exp.* ♂ 40, ♀ 50 millim.

528 *g*. Anaphosia aurantiaca. (Plate XXIX. fig. 29.)

Anaphosia aurantiaca, Hmpsn. A. M. N. H. (8) iv. p. 354 (1909).

♂. Head, thorax, and abdomen orange; tibiæ streaked with black; tarsi black and orange. Fore wing yellowish white, the inner and terminal areas more or less strongly suffused with orange; the costa black; an oblique sinuous black medial line, incurved from median nervure to vein 1; an oblique sinuous black postmedial line excurved below costa and joined at vein 5 by a curved black line from costa before apex; an oblique black streak from just beyond the postmedial line below vein 4 to termen; a black terminal line; cilia orange. Hind wing orange. Underside of fore wing with black suffusion in and below the cell to medial line and beyond middle of postmedial line.

Hab. Transvaal (*C. H. Pead*), 2 ♂ type. *Exp.* 44 millim.

528 *h*. Anaphosia astrigata.

Anaphosia astrigata, Hmpsn. P. Z. S. 1910, p. 393, pl. xxxvi. f. 30.

Head orange; antennæ black; thorax yellowish white, the tegulæ edged with orange; pectus and legs orange, the fore femora blackish above, mid tibiæ streaked with black, the tarsi blackish; abdomen orange. Fore wing silvery yellowish white; the costa black; an oblique black medial line slightly bent outwards to inner margin; postmedial line black, oblique to vein 2, then erect, joined at vein 5 by a curved black line from costa before apex; cilia orange. Hind wing orange-yellow. Underside of fore wing suffused with brown except terminal half of costal area and terminal area.

Hab. Congo, Katanga Distr. (*Neave*), 2 ♂, 3 ♀; Germ. E. Africa, Usangu Distr. (*Neave*), 1 ♂; Mashonaland, Salisbury (*Marshall*), 1 ♀ type. *Exp.* 34–44 millim.

*528 *i*. Anaphosia parallela. (Plate XXIX. fig. 30.)

Anaphosia parallela, Beth.-Baker, A. M. N. H. (8) vii. p. 536 (1911).

♂. Head, dorsum of tegulæ, and prothorax fulvous yellow, the rest of thorax white; antennæ brown, the shaft white above towards base; pectus and legs suffused with brown; abdomen pale grey, the anal tuft and ventral surface fulvous yellow. Fore wing silvery white; the costal edge black; a black medial line, very slightly excurved below costa, then oblique to just below the cell and erect to inner margin; an obliquely incurved sinuous black postmedial line; the apex faintly tinged with fuscous. Hind wing glossy white. Underside of fore wing yellowish suffused with fuscous except on marginal areas, a waved blackish subterminal line except towards apex and tornus; hind wing with the costa suffused with yellow, a faint oblique blackish subterminal bar from costa.

Hab. N. Angola, N'Dalla Tando (*Ansorge*), type † ♂ in Coll. Bethune-Baker. *Exp.* 34 millim.

*529 *a*. Gnamptonychia orsola. (Plate XXIX. fig. 31.)

Gnamptonychia orsola, Dyar, Pr. U.S. Nat. Mus. xxxviii. p. 233 (1910).

♂. Head and tegulæ ochreous yellow; antennæ, thorax, and abdomen black, the thorax tinged with grey and the last with the anal tuft yellow; pectus, femora, part of tibiæ, and ventral surface of abdomen yellow. Fore wing uniform dark slate-grey. Hind wing dull black.

Hab. Mexico, Mexico City (*Müller*, *Dugès*), Popocatapetl Park (*Schaus*). *Exp.* 38 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat Mus.

530 *a*. Inopsis imitata, *H. Edw.*

This is a distinct species; abdomen with the anal tuft of male yellow except above.

*533 *a*. **Nyctosia pœcilonotus.** (Plate XXIX. fig. 32.)

Nyctosia poicilonotus, Dyar, Pr. U.S. Nat. Mus. xlii. p. 50 (1912).

♂. Head with the frons dark grey, the vertex orange; antennæ blackish; thorax orange, the tegulæ and patagia dark grey; pectus rosy orange at sides; abdomen blue-black, the basal segment rosy orange, the anal tuft orange. Fore wing uniform leaden grey. Hind wing crimson, the costa and termen narrowly dark leaden grey.

Hab. Mexico, Mexico City (*Müller*). *Exp.* 40 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

Page 255. Under **PROTOSIA** insert:—

Type.

Pygoctenucha, Grote, Trans. Kansas Ac. Sci. viii. p. 46 (1333)... *terminalis*,

which has priority.

537. **Pygoctenucha terminalis**, insert (syn.):—

Ctenucha harrisii, Boisd. Ann. Soc. Ent. Belge, xii. p. 72 (1869); Kirby, Cat. Het. p. 178.

and delete *Seirarctia bolteri*.

*538 *a*. **Pygoctenucha funerea.**

Pygoctenucha funerea, Grote, Trans. Kansas Ac. Sci. viii. p. 46 (1883).

♂. Dull black with traces of bluer reflection; tegulæ with yellow lateral spots; abdomen with the extremity yellow.

Hab. U.S.A., N. Mexico. *Exp.* 28 millim. This species is unknown to me.

*538 *b*. **Pygoctenucha clita.**

Elysius clitus, Druce, Biol. Centr.-Am., Het. i. p. 91 (1884); Kirby, Cat. Het. p. 219.

♂. Palpi smoothly scaled, the 2nd and 3rd joints long and slender; fore wing with long narrow areole.

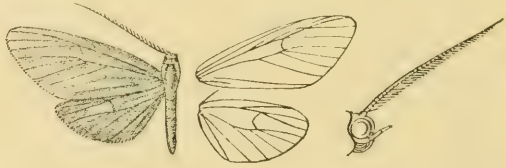

Fig. 148.—*Pygoctenucha clita*, ♂. ½.

Orange-yellow; palpi blackish except towards base; antennæ black; fore tibiæ and tarsi fuscous above; wings uniform orange-yellow.

Hab. Costa Rica, Boucard, type † ♂ in Coll. Joicey. *Exp.* 46 millim.

Genus **CELAMODES**, nov.

Type, *C. rufotincta*.

Proboscis fully developed; palpi upturned, slender, reaching to about middle of frons, which is smooth; antennæ of male with bristles and cilia; tibiæ with the spurs long. Fore wing rather narrow, the apex rectangular, the termen evenly curved; the cell very long; vein 2 from beyond middle of cell, oblique; 3 from well before angle; 5, 6 very shortly stalked or from a point at middle of discocellulars; 7, 8, 9 stalked, 7 from beyond 9; 10, 11 from cell. Hind wing with vein 2 from towards angle of cell; 3, 4 shortly stalked or from cell; 5 from well above angle; 6, 7 on a long stalk; 8 from middle of cell.

In key differs from *Caprimima* in the fore wing having veins 5, 6 from a point or very shortly stalked.

*541 *a*. Celamodes rufotincta.

Manoba rufotincta, Roths. Nov. Zool. xix. p. 231 (1912).

♂. Head, tegulæ, and shoulders pure white, the tegulæ with some fuscous brown at tips; antennæ red-brown, ringed with white towards base; palpi red-brown; thorax red-brown, the patagia at base and tips and the metathorax behind white; pectus and legs pale rufous, the fore tibiæ and the tarsi red-brown ringed with white; abdomen white tinged with rufous. Fore wing white tinged with pale brown, the basal half of costal area pure white, extending below

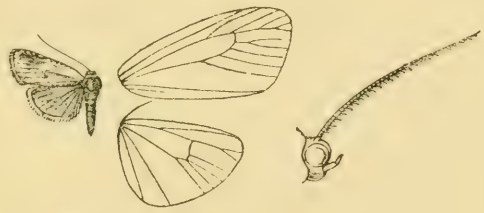

Fig. 149.—*Celamodes rufotincta*, ♂. ½.

costa to beyond middle, the terminal half of costal area deep rufous forming spots towards middle of wing and towards apex with white points on the costa with dark streaks between them; antemedial black points on subcostal nervure and in submedian fold and some points on middle of inner margin; postmedial line black, punctiform, very oblique from costa to vein 6 and strongly incurved below vein 4; a pale brown subterminal shade with some black scales on it below apex and at inner margin; cilia pale brown at base, white at tips. Hind wing white tinged with pale red-brown.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♂ in Coll. Rothschild; Br. N. Guinea, Mambare R., Biagi (*Meek*). *Exp.* 18–20 millim.

Genus **MICROTANE.**

Type.
Microtane, Hmpsn. A. M. N. H. (7) viii. p. 183 (1901) ..... *fusca.*

Proboscis absent; palpi porrect, slender, not reaching beyond the frons; antennæ of male ciliated; tibiæ with the spurs long. Fore wing with the apex rounded; vein 3 from before angle of cell; 4, 5 stalked; 6 from upper angle; 7, 8, 9 stalked, 7 from beyond 9; 10, 11 from cell. Hind wing with vein 2 from towards angle of cell; 3, 4 stalked; 5 absent; 6, 7 stalked; 8 from middle of cell.

In key differs from *Arva* in the proboscis being absent and the fore wing having vein 7 from 8 beyond 9.

541 *b.* **Microtane fusca.**

Microtane fusca, Hmpsn. A. M. N. H. (7) viii. p. 183 (1901).

♂. Fuscous brown; abdomen blackish, the anal tuft ochreous. Fore wing irrorated with black; the costal area blackish towards base; small black spots in middle and end of cell and beyond its

Fig. 150.—*Microtane fusca*, ♂. ♀.

extremity; a blackish patch on costa just beyond middle and another before apex; a terminal series of black points. Hind wing fuscous with indistinct discoidal spot.

Hab. Ceylon, Matelé (*Pole*), 1 ♂ type. *Exp.* 12 millim.

Page 258. Under **STICTANE** insert:—

Type.
Manoba, Wlk. Journ. Linn. Soc., Zool. vii. p. 62 (1863) ..... *implens*,

which has precedence.

*542 *a.* **Manoba geminata.**

Celama geminata, Mab. Ann. Soc. Ent. Fr. 1899, p. 727.

Antennæ of male with very long branches curled at tips.

♂. White with a slight fuscous tinge; 3rd joint of palpi and branches of antennæ blackish; abdomen more strongly tinged with fuscous. Fore wing with traces of antemedial points on costa and vein 1; a medial fuscous spot on costa and incurved line from cell

to inner margin; two prominent black points beyond angles of cell; traces of a curved subterminal series of points; some brown suffusion on termen. Hind wing and underside tinged with brown.

Fig. 151.—*Manoba geminata*, ♂. ⅔.

Hab. Madagascar, Baie D'Antongil (*Mocquerys*), type † ♂ in Coll. Mabille. *Exp.* 12 millim.

*542 *b*. Manoba terminalis.

Manoba terminalis, Roths. Nov. Zool. xix. p. 231 (1912).

Antennæ of male with rather long branches, the apical part ciliated; fore wing with veins 10, 11 from a point.

Head and thorax silvery white, the dorsum of thorax suffused with cupreous brown; antennæ brown except at base, palpi and frons brown; legs tinged with brown; abdomen white suffused with brown. Fore wing silvery white; the costal edge fuscous brown to beyond middle; a small dark antemedial spot on costa and some diffused cupreous brown on inner margin; a rather triangular patch of dark

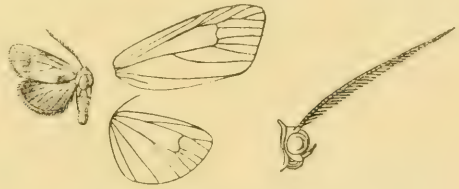

Fig. 152.—*Manoba terminalis*, ♂. ⅔.

suffusion on middle of costa; the terminal area suffused with fuscous brown, with a white subterminal line oblique from costa to vein 4; a patch of cupreous red suffusion below apex and some cupreous red on termen towards tornus. Hind wing white tinged with brown, the apical half of terminal area darker.

Hab. Dutch N. Guinea, Setekwa R., Snow Mts. (*Meek*); Br. N. Guinea, Kumusi R. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* ♂ 14, ♀ 16 millim.

*542 *c*. Manoba lactogrisea.

Manoba lactogrisea, Roths. Nov. Zool. xix. p. 231 (1912).

Antennæ of male with long branches, the apical part ciliated.

♂. Head and thorax silvery white, the dorsum of thorax slightly tinged with brown; antennæ and palpi brown; pectus and legs white tinged with brown, the fore legs darker brown in front; abdomen brown with a cupreous gloss, the anal tuft and ventral surface white tinged with brown, the anal tuft yellowish below. Fore wing silvery white, the costal edge black-brown towards base, a small antemedial black-brown patch on costa and a large patch of black-brown suffusion before the postmedial line, its inner edge extending

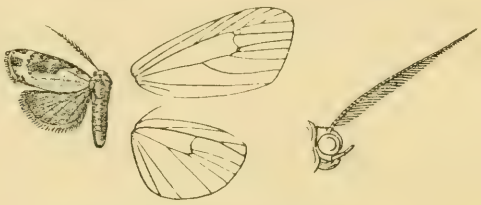

Fig. 153.—*Manoba lactogrisea*, ♂ ½.

obliquely from costa before middle to lower angle of cell; postmedial line blackish, oblique and sinuous to vein 6, then minutely dentate obsolescent and erect; a black-brown patch on costa towards apex, a patch on termen below apex and slight patch above tornus; a terminal series of black points. Hind wing white tinged with brown, the termen and cilia darker on apical half. Underside of fore wing suffused with fuscous brown; hind wing with slight discoidal spot.

Hab. Dutch N. Guinea, Setekwa R., Snow Mts. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

*542 *d*. Manoba divisa. (Plate XXX. fig. 1.)

Zygænosia divisa, Roths. Nov. Zool. xx. p. 204 (1913).

♂. Head, thorax, and abdomen creamy white; antennæ, palpi, fore tibiæ, and the tarsi brown. Fore wing creamy white, the apical area dark brown with a cupreous gloss, its inner edge running obliquely from middle of costa to tornus, the costal edge dark brown to base; some cupreous brown suffusion in and below basal half of cell and an oblique black-brown subbasal mark from submedian fold to inner margin. Hind wing creamy white, the cilia tinged with red-brown except towards tornus. Underside of fore wing with the costal and apical areas tinged with brown; hind wing with the apical area tinged with brown.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 14 millim.

542*e*. **Manoba implens**, tr. from *Nola*, no. 95, and insert (syn.) :—

Stictane junctilinea, Hmpsn. A. M. N. H. (7) viii. p. 183 (1901).

Singapore (*Ridley*), 2 ♀ type; Philippines, Luzon, Bequet Prov., Irisan (*McGregor*), 1 ♀.

543*a*. **Manoba atripuncta**. (Plate XXX. fig. 2.)

Manoba atripuncta, Hmpsn. A. M. N. H. (8) iv. p. 355 (1909).

♂. Head and thorax pale grey tinged with brown; palpi black except at base; abdomen grey dorsally suffused with fuscous brown. Fore wing grey tinged with brown; the costal edge black towards base; subbasal black points below costa and cell with a black point beyond them in the cell; a diffused fuscous bar from middle of costa and a slight nearly erect line from cell to inner margin; postmedial black points above and below vein 6; a fuscous spot on costa before apex and a curved subterminal series of black points; a terminal series of black points. Hind wing grey suffused with fuscous brown.

Hab. S. Nigeria, Old Calabar (*Sampson*), 1 ♂ type, Ilesha (*Humfrey*), 1 ♂. *Exp.* 14 millim.

544*a*. **Manoba progonia**, n. sp. (Plate XXX. fig. 3.)

♀. Head and thorax white; antennæ brownish; palpi and fore legs fuscous; abdomen suffused with brown. Fore wing silvery white, the basal half slightly irrorated with blackish; small antemedial black spots below costa and in cell; medial line fuscous, slightly excurved from below costa to submedian fold and with triangular blackish patch beyond it on costa; a curved subterminal series of black points with a rather larger spot below costa and oblique mark beyond it from costa; a terminal series of black striæ. Hind wing white. Underside of both wings tinged with fuscous.

Hab. Br. E. Africa, Kikuyu (*Crawshay*), 1 ♀ type. *Exp.* 18 millim.

544*b*. **Manoba tornalis**, n. sp. (Plate XXX. fig. 4.)

♀. Head and thorax white; antennæ fuscous except basal joint; abdomen white, dorsally suffused with brown. Fore wing silvery white; a round black discoidal spot, a black subapical point, and a fuscous subterminal patch from vein 3 to tornus. Hind wing silvery white. Underside of fore wing with the costal area broadly suffused with fuscous.

Hab. Gold Coast, Bibianaha (*Spurrell*), 2 ♀ type. *Exp.* 14 millim.

544*c*. **Manoba apicalis**. (Plate XXX. fig. 5.)

Stictane apicalis, Hmpsn. A. M. N. H. (7) xi. p. 344 (1903).

White; palpi, frons, antennæ, and tarsi fuscous; abdomen brownish. Fore wing with indistinct diffused brownish antemedial

patches in cell and above inner margin; a similar postmedial patch above inner margin and a spot on costa; the apical area tinged with fuscous and with a blackish subapical spot; cilia brown. Hind wing brownish white.

Hab. Gold Coast, Bibianaha (*Spurrell*), 3 ♂; S. Nigeria, Old Calabar (*Crompton*), 1 ♀ type. *Exp.* 14 millim.

*544 *d.* **Manoba albina.** (Plate XXX. fig. 6.)

Manoba albina, Roths. Nov. Zool. xix. p. 231 (1912).

♀. Head and thorax silvery white, the latter with some cupreous brown on dorsum; antennæ brown except towards base; abdomen brown, the anal tuft white; palpi, legs, and ventral surface of abdomen white tinged with brown. Fore wing silvery white; a patch of pale cupreous brown suffusion on basal costal area defined on inner and outer sides and below by black; a blackish striga from middle of costa; postmedial line with oblique blackish striga from costa, then faint, incurved below costa and in submedian interspace and excurved at middle and above inner margin, a cupreous brown tinge before it except at costa; a blackish spot on costa towards apex, then a line formed of somewhat dentate cupreous brown marks, excurved below costa and at middle; a terminal series of small brown spots. Hind wing white faintly tinged with brown.

Hab. Br. N. Guinea, Angabunga R. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 16 millim.

*544 *e.* **Manoba alboplagiata.** (Plate XXX. fig. 7.)

Manoba alboplagiata, Roths. Nov. Zool. xix. p. 232 (1912).

♀. Head and thorax silvery white; antennæ red-brown except at base; fore legs tinged with red-brown in front; abdomen white, dorsally suffused with brown towards extremity. Fore wing pale red-brown; the inner area silvery white from base of costa to beyond middle, and a large silvery white patch on costal area from end of cell to apex, extending to lower angle of cell; the brown area with deeper red-brown sinuous antemedial line and discoidal bar; a small elliptical red-brown spot beyond lower angle of cell; postmedial line red-brown, obsolescent on the white area, excurved to discal fold, then approximated to the somewhat dentate red-brown subterminal line which forms a small patch at costa and is excurved below costa; a terminal series of small dark brown spots. Hind wing white tinged with red-brown.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 14 millim.

Genus **PARASCAPTIA.**

Type.

Parascaptia, Beth.-Baker, Nov. Zool. xv. p. 195 (1908) ..... *biplagata.*

Proboscis fully developed; palpi upturned, very slender, reaching about

to middle of frons; antennæ of male ciliated; tibiæ with the spurs long. Fore wing with the costa and inner margin lobed towards base, the apex rounded; vein 2 from well before angle of cell, curved at base; 3, 4 stalked; 5 absent; the discocellulars obsolescent; 6 from below angle of cell; 7, 8, 9 on a long stalk, 7 from beyond 9; 10, 11 from cell, the latter curved. Hind wing with vein 2 from towards angle of cell; 3, 4 stalked; 5 absent; 6, 7 strongly stalked; 8 from towards end of cell.

In key differs from *Lexis* in the fore wing having vein 11 not anastomosing with 12.

544*f*. Parascaptia trifasciata. (Plate XXX. fig. 8.)

Garudinia trifasciata, Roths. Nov. Zool. xix. p. 234 (1912).

♂. Head, tegulæ, patagia, and prothorax golden yellow, the hinder part of thorax bright rufous; antennæ, palpi at sides, and fore legs rufous; abdomen white, dorsally tinged with ochreous. Fore wing golden yellow; an oblique subbasal bright rufous patch glossed in parts with silvery blue from subcostal nervure to inner margin, a similar oblique medial band narrowing to costa, and a similar subterminal band expanding at middle and narrowing to costa and inner margin. Hind wing yellowish white.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), 1 ♂. *Exp.* 16 millim. Type † ♂ in Coll. Rothschild.

*544*g*. Parascaptia biplagata.

Parascaptia biplagata, Beth.-Baker, Nov. Zool. xv. p. 195 (1908).
Garudinia aureopurpurata, Roths. Nov. Zool. xix. p. 233 (1912).

♂. Head and tegulæ golden yellow; thorax purplish red, the patagia yellow at base; pectus, legs, and abdomen yellow tinged with red. Fore wing purplish red; a large wedge-shaped yellow patch on base of costal area; a wedge-shaped yellow band from middle of costa to a point on inner margin beyond middle, edged at

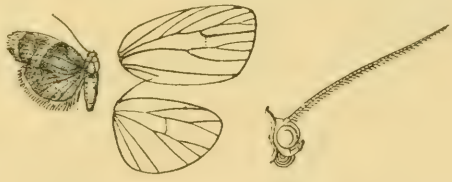

Fig. 154.—*Parascaptia biplagata*, ♂. ¾.

sides by some blue scales; the apical part of costa and the termen narrowly yellow; cilia yellow. Hind wing pale yellow.

Hab. Br. N. Guinea, Ekeikei (*Pratt*), type † ♂ in Coll. Bethune-Baker, Collingwood Bay, Haidana, type † ♂ *aureopurpurata* in Coll. Rothschild. *Exp.* 18 millim.

Genus GARUDINODES.

Type.

Garudinodes, Beth.-Baker, Nov. Zool. xv. p. 195 (1908) ..... *bicolorana*.

Proboscis fully developed; palpi upturned, slender, reaching about to vertex of head; antennæ of male ciliated; tibiæ with the spurs long; abdomen of male with the claspers long and tufted with hair, of female with large anal tuft. Fore wing rather short and broad, the apex rounded; vein 2 from close to angle of cell; 3, 4 strongly stalked; 5 absent; the discocellulars almost obsolete; vein 6 typically from upper angle of cell; 7, 8 and 10 stalked, 9 absent; 11 from cell. Hind wing with vein 2 from close to angle of cell; 3, 4 strongly stalked; 5 absent; 6, 7 strongly stalked; 8 from middle of cell.

In key differs from *Ctenosia* in the palpi being upturned.

545 *a*. Garudinodes trizona.

Garudinodes trizona, Hmpsn. A. M. N. H. (8) viii. p. 403 (1911).
Garudinodes affinis, Roths. Nov. Zool. xix. p. 232 (1912).

Fore wing of male with the subcostal nervure and veins arising from it strongly curved downwards and approximated to the median nervure, a fringe of long downturned hair from the subcostal nervure on upperside from base to end of cell and an elliptical glandular swelling in base of cell on underside; hind wing with the upper part of cell very short, the costa lobed at middle and fringed

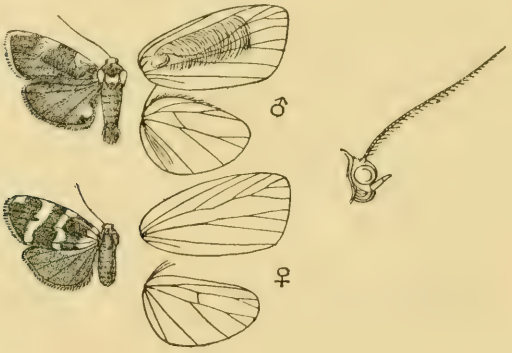

Fig. 155.—*Garudinodes trizona*, ♂, ♀. ½.

with hair, then truncate, the inner area with a fold containing a fringe of hair on underside.

♂. Head pure white; palpi and antennæ red-brown; thorax bright red-brown, the patagia except at tips and paired patches on mesothorax white; fore tibiæ with white band, the tarsi ringed with white, the mid tibiæ white in front; abdomen paler red-brown. Fore wing bright red-brown; a small white patch at base; large ante- and postmedial white patches on costal area and on the fringe of hair; the costa towards apex and cilia white. Hind wing pale

red-brown, the inner area deeper in colour with a white patch above tornus and the cilia white towards tornus.

♀. Patagia and dorsum of thorax without white; fore wing with the basal white patch produced somewhat on inner area, ante- and postmedial oblique slightly sinuous white bands; hind wing without white.

Hab. Dutch N. Guinea, Ron I. (*Doherty*), 1 ♀ type; Br. N. Guinea, Collingwood Bay, Haidana (*Meek*), type † ♂, ♀ *affinis* in Coll. Rothschild. *Exp.* 20 millim.

*545 *b*. Garudinodes castanea. (Plate XXX. fig. 9.)

Garudinodes castaneus, Roths. Nov. Zool. xix. p. 232 (1912).

♂. Head white tinged with red-brown; antennæ and palpi deep red-brown, thorax and abdomen deep red-brown; fore legs with the tibiæ banded with white and the tarsi ringed with white, the mid legs white in front. Fore wing deep red-brown, with small white patch tinged with red-brown at middle of costal area. Hind wing red brown, the inner area deeper red-brown.

Hab. Br. N. Guinea, Collingwood Bay, Haidana (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

*545 *c*. Garudinodes albiceps.

Lambula albiceps, Roths. Nov. Zool. xix. p. 213 (1912).

Fore wing of male with an incision at middle of costa with fringe of long scales below it on upperside and elongate patch of thick white scales in cell on underside; hind wing with the terminal half of costal area truncate, the extremity of costal area produced upwards, excised in front and fringed with rough scales below, an elongate patch of thick white scales in cell above.

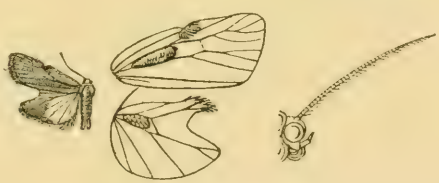

Fig. 156.—*Garudinodes albiceps*, ♂. ½.

♂. Head white, the palpi and antennæ brown; thorax and abdomen dark red-brown; legs brown and white; extremity of abdomen white below. Fore wing uniform dark red-brown. Hind wing white; the terminal area dark red-brown, broadly at apex and narrowing to a point at vein 1, emitting a streak on median nervure to base; cilia brown; the underside with the lobed costal area brown.

♀. Fore wing with small white spot at apex; hind wing with the terminal band not giving off a streak on median nervure.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* 22 millim.

*545 *d.* Garudinodes albofasciata. (Plate XXX. fig. 10.)

Lambula albofasciata, Roths. Nov. Zool. xix. p. 213 (1912).

♀. Head pure white, the palpi and antennæ except at base brown; thorax and abdomen very dark red-brown; legs white and brown; ventral surface of abdomen pure white at extremity. Fore wing very dark red-brown with a greyish gloss; a white subbasal band from cell to inner margin; an oblique sinuous band from costa before middle to middle of inner margin; a postmedial spot on costa giving off a narrow obliquely curved band to inner margin near tornus; a spot at apex. Hind wing white; a terminal reddish brown band, rather broad at costa and narrowing to a point at vein 1; cilia brown; the underside with the costal area brown.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 22 millim.

* 545 *e.* Garudinodes bicolorana.

Garudinodes bicolorana, Beth.-Baker, Nov. Zool. xv. p. 195 (1908).

♀. Head white, the palpi and antennæ brown; thorax purple-brown, the terminal half of patagia white; legs mostly white, the tarsi slightly ringed with brown; abdomen brown, the ventral

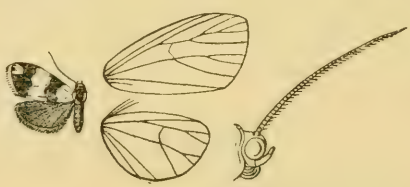

Fig. 157.—*Garudinodes bicolorana*, ♀. ½.

surface whitish. Fore wing white with broad purple-brown antemedial curved band; the terminal area broadly purple-brown with rather irregular inner edge, an elliptical apical white patch; cilia white. Hind wing pale red-brown, the cilia whitish at tips.

Hab. Br. N. Guinea, Ekeikei (*Pratt*), type † ♀ in Coll. Bethune-Baker. *Exp.* 20 millim.

546. Pseudoblabes oophora.

Larva. Piepers, Tijd. v. Ent. xlvii. p. 146, pl. x. f. 5.

Black or dark green marbled with bright green; hair sparse,

short, black. Food-plants, Lichens on *Grewia blumei* and *Muscus*.

Cocoon sometimes covered with moss.

Genus **PADENODES**, nov.

Type, *P. cuprizona*.

Proboscis fully developed; palpi upturned, slender, reaching to about middle of frons which is smooth; antennæ of male ciliated; tibiæ with the spurs long. Fore wing rather long and narrow, the apex rounded; vein 2 towards angle of cell; 3, 4 stalked; 5 absent; 6 from below upper angle; 7, 8, 9 stalked, 7 from beyond 9; 10, 11 from the cell, free. Hind wing with the costa highly arched at middle, then oblique; veins 3, 4 strongly stalked; 5 absent; 6, 7 strongly stalked; 8 from middle of cell and downcurved, the subcostal nervure depressed towards end of cell; male with an elliptical patch of androconia on upperside at origin of vein 8.

In key differs from *Threnosia* and *Gampola* in the fore wing having vein 11 not anastomosing with 12.

546 *a*. **Padenodes cuprizona**, n. sp.

♂. Head and tegulæ pure white; antennæ and thorax golden cupreous; palpi, fore and mid legs rufous; pectus and abdomen ochreous. Fore wing white; the base golden cupreous; a golden cupreous band just beyond middle, its inner edge slightly curved,

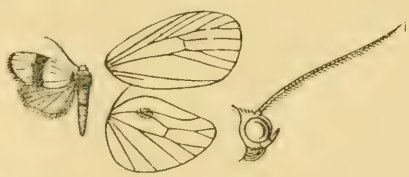

Fig. 158.—*Padenodes cuprizona*, ♂. ½.

its outer edge excurved at discal fold; the costa tinged with rufous towards apex; the termen narrowly and cilia rufous with a cupreous tinge. Hind wing pale ochreous yellow.

Hab. Dutch N. Guinea, Up. Setekwa R., Snow Mts. (*Meek*), 1 ♂ type. *Exp.* 20 millim.

*546 *b*. **Padenodes unifascia.** (Plate XXX. fig. 11.)

Padenodes unifascia, Roths. Nov. Zool. xix. p. 235 (1912).

♂. Head, tegulæ, base of patagia, and prothorax pure white, the rest of thorax golden brown; antennæ and palpi golden brown; pectus and legs white tinged with red-brown; abdomen ochreous white. Fore wing pure white; the base cupreous brown with oblique outer edge; an oblique cupreous brown medial band, narrow towards costa, expanding triangularly below the cell; a

small cupreous brown spot at lower angle of cell sometimes connected with the medial band; the termen narrowly and cilia cupreous brown from just below apex to submedian fold, its inner edge minutely waved. Hind wing pale yellow. Underside of fore wing suffused with red-brown except the inner area.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

547. **Garudinia biplagiata**, insert (syn.) :—

Garudinia biguttata, Roths. Nov. Zool. xix. p. 233 (1912).

Assam, Khásis, type † ♂ in Coll. Rothschild.

*548 *a*. **Garudinia bimaculata.** (Plate XXX. fig. 12.)

Garudinia bimaculata, Roths. Nov. Zool. xix. p. 233 (1912).

Head and thorax ochreous white; antennæ brownish; abdomen fuscous brown, the anal tuft greyish; pectus, legs, and ventral surface of abdomen whitish tinged with brown. Fore wing ochreous white; a large dark brown patch tinged with leaden grey on inner margin before middle, rounded above and extending into the cell; a broad obliquely curved dark brown subterminal band tinged with leaden grey, its outer edge excurved at middle. Hind wing white tinged with red-brown especially towards termen; the underside with the costal area suffused with red-brown.

Hab. Labuan (*Everett*), type † ♂, ♀ in Coll. Rothschild. *Exp.* 16 millim.

Genus **THERMOGRAPTA**, nov.

Type, *T. rufizonata*.

Proboscis fully developed; palpi upturned, slender, reaching to middle of frons which is smooth; antennæ of male ciliated; tibiæ smoothly scaled and with all the spurs present. Fore wing long and narrow, the apex rounded; vein 2 curved, shortly stalked with 3, 4 which are strongly stalked; 5 absent; 6 from well below angle of cell; 7, 8, and 10 stalked, 9 absent, 7 from beyond 10; 11 from cell, free. Hind wing with the cell long; vein 2 from middle of cell; 3, 4 stalked; 5 from just below middle of discocellulars; 6, 7 coincident; 8 from towards end of cell.

In key differs from *Licnoptera* in the fore wing having vein 2 stalked with 3, 4; hind wing with veins 3, 4 stalked, 6, 7 coincident.

550 *a*. **Thermograpta rufizonata**, n. sp.

♂. Head and thorax silvery white, the tips of patagia and metathorax bright orange-fulvous; antennæ brown, except basal joint; palpi rufous; pectus and legs pale rufous; abdomen white tinged with brown. Fore wing silvery white; the base bright orange-

fulvous with a little white at base of inner margin; a slightly curved bright orange-fulvous band from costa just before middle to middle of inner margin, its outer edge slightly indented at subcostal

Fig. 159.—*Thermograpta rufizonata*, ♂. ½.

and median nervures; an oblique bright orange-fulvous band from costa beyond middle to tornus, its inner edge slightly irregular; a bright orange-fulvous apical patch. Hind wing ochreous white.

Hab. Dutch N. Guinea, Up. Setekwa R., Snow Mts. (*Meek*), 1 ♂ type. *Exp.* 20 millim.

*551 *a*. **Eucyclopera minuta.** (Plate XXX. fig. 13.)

Lambula minuta, Roths. Nov. Zool. xix. p. 214 (1912).

♂. Head, tegulæ, and shoulders pure white, the palpi and antennæ except at base brown; thorax dark brown with a silvery gloss; pectus, legs, and abdomen whitish suffused with brown. Fore wing pure white; a large dark brown patch with a silvery gloss extending from subcostal nervure to inner margin and from base to beyond middle; a curved greyish fuscous band from below costa towards apex to termen above tornus and a fine fuscous line on apical part of termen. Hind wing creamy white. Underside of fore wing suffused with brown.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 16 millim.

Genus **CYCLOSODES.**

Type.

Cyclosodes, Hmpsn. A. M. N. H. (7) viii. p. 183 (1901) ..... *flavicostata*.

Proboscis fully developed; palpi slender, oblique, extending to just beyond frons; antennæ of female ciliated; tibiæ with the spurs long; anal tuft of female large. Fore wing short, broad, the costa strongly arched, the apex rounded; vein 2 curved at origin; 3 from before angle; 4, 5 strongly stalked; 6, 7 strongly stalked; 8, 9 absent; 10, 11 from cell, free. Hind wing with vein 2 from towards angle of cell; 3, 4 coincident; 5 from well above angle; 6, 7 strongly stalked; 8 from middle of cell.

In key differs from *Padenia* (♀) in the fore wing having vein 8 absent, the hind wing with veins 3, 4 coincident.

551 *b*. Cyclosodes flavicostata.

Cyclosodes flavicostata, Hmpsn. A. M. N. H. (7) viii. p. 184 (1901).

♀. Head fuscous brown; tegulæ and patagia ochreous; thorax brown; abdomen fuscous, the anal tuft pale. Fore wing silky red-

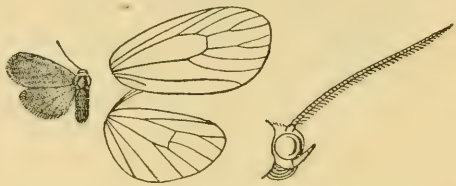

Fig. 160.—*Cyclosodes flavicosta*, ♀. ½.

brown, the costa and cilia ochreous yellow. Hind wing fuscous brown.

Hab. Borneo, Kuching (*Shelford*), 1 ♀ type. *Exp.* 20 millim.

*552 *a*. Padenia sordida. (Plate XXX. fig. 14.)

Padenia sordida, Roths. Nov. Zool. xix. p. 234 (1912).

♀. Head and thorax whitish suffused with brown; abdomen fuscous brown, the anal tuft and ventral surface whitish tinged with brown. Fore wing white tinged with brown; a narrow obliquely curved cupreous brown antemedial band; a similar post-medial band, oblique to vein 4, then excurved to inner margin near tornus. Hind wing whitish tinged with red-brown.

Hab. Malay Peninsula, Gunong Ijau, type † ♀ in Coll. Rothschild. *Exp.* 22 millim.

553. Padenia duplicana, insert (syns.):—

Garudinia bizonata, Roths. Nov. Zool. xix. p. 233 (1912).
Garudinia bifasciata, Roths. Nov. Zool. xix. p. 233 (1912).

"Brazil, Paraña, Entre Rios" (loc. err.), type † ♂ *bizonata* in Coll. Rothschild; N. Borneo, Penungah, type † ♂ *bifasciata* in Coll. Rothschild.

*553 *a*. Padenia bifasciata. (Plate XXX. fig. 15.)

Padenodes bifasciatus, Roths. Nov. Zool. xix. p. 235 (1912).

♂. Head and thorax silvery white with a curved golden cupreous band across patagia and thorax; antennæ brown; palpi and legs tinged with red-brown; abdomen white, the anal tuft yellowish. Fore wing silvery white; a narrow oblique slightly curved golden

cupreous antemedial band; a similar band from costa beyond middle, incurved at vein 6 and excurved below vein 4 to tornus. Hind wing white. Underside of fore wing and costal area of hind wing tinged with ochreous.

Hab. Br. N. Guinea, Up. Aroa R. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

*553 *b*. **Padenia cupreifascia.** (Plate XXX. fig. 16.)

Garudinia cupreifascia, Roths. Nov. Zool. xix. p. 233 (1912).

♀. Head creamy white, the palpi and antennæ red-brown; thorax red-brown, the tips of patagia and metathorax behind creamy white; pectus and legs pale red-brown; abdomen whitish, the anal tuft and ventral surface tinged with red-brown. Fore wing creamy white, the costal edge pale rufous; obliquely curved ante- and postmedial bright golden cupreous bands. Hind wing creamy white.

Hab. Sumbawa, Tambora (*Doherty*), type † ♀ in Coll. Rothschild. *Exp.* 22 millim.

Page 265. Under **NARASODES** del. *Tampea.*

556 will stand as **Narasodes lithosioides**, Hmpsn. nec Snell.

*556 *a*. **Narasodes rufocostalis.** (Plate XXX. fig. 17.)

Macaduma rufocostalis, Roths. Nov. Zool. xix. p. 236 (1912).

♀. Head and thorax bright red-brown; pectus, legs, and abdomen grey-brown. Fore wing bright red-brown, the apical part of costa rufous; a small round blackish discoidal spot. Hind wing and underside of fore wing grey-brown.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 16 millim.

Genus **MACADUMOSIA**, nov.

Type, *M. excisa.*

Proboscis fully developed; palpi upturned, slender, reaching to about middle of frons which is smooth; antennæ of male ciliated; tibiæ with the spurs long. Fore wing short and broad, the costa excised towards apex, the termen evenly curved, the inner margin arched towards base; vein 2 from towards angle of cell, curved at base; 3, 4 shortly stalked; 5 from above angle; 6 from below upper angle; 7, 8, 9 stalked, 7 from beyond 9; 10, 11 from cell, 11 curved. Hind wing with vein 2 from towards angle of cell; 3, 4 stalked; 5 from above angle; 6, 7 on a long stalk; 8 from middle of cell.

In key differs from *Heliosia* in the hind wing having veins 3, 4 stalked.

*556 *b*. Macadumosia excisa.

Garudinia excisa, Roths. Nov. Zool. xix. p. 234 (1912).

♂. Head and thorax bright chestnut-brown; pectus, legs, and abdomen whitish suffused with red-brown. Fore wing bright chestnut-brown, the excised part of costa and a large patch from in and beyond end of cell to inner margin paler and greyer, the outer edge of the patch obliquely curved to inner margin near tornus; a

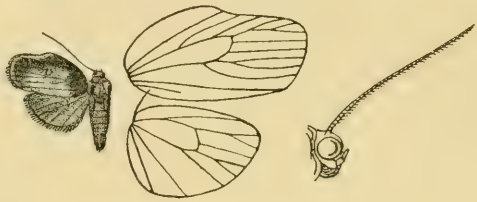

Fig. 161.—*Macadumosia excisa*, ♂. ⅔.

small whitish discoidal spot; traces of a red-brown antemedial line, oblique to median nervure, then erect; traces of a red-brown postmedial line, oblique to vein 4, then erect; a deep chestnut-brown terminal line defined on inner side by whitish; cilia whitish. Hind wing pale red-brown; cilia whitish, red-brown at base on costal half; the underside whitish, the costal area tinged with red-brown towards apex.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 16 millim.

*557 *a*. Macaduma plagosa.

Padenodes plagosus, Roths. Nov. Zool. xix. p. 235 (1912).

Antennæ of male with short branches ending in bristles; fore wing with the termen evenly curved; vein 6 from the cell.

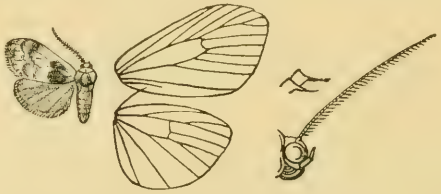

Fig. 162.—*Macaduma plagosa*, ♂. ½.

♂. Head, tegulæ, and base of patagia silvery white, the rest of thorax suffused with golden brown; antennæ brown except at base; palpi, frons, pectus, legs, and abdomen yellow. Fore wing

white tinged in parts with pale brown; antemedial patches of olive-brown suffusion in and below the cell and on inner margin, separated by the white in submedian fold; a patch of olive-brown suffusion on costal area towards apex, with traces of a band from it to near tornus with spot before it on inner margin; a patch of olive-brown suffusion on middle of termen. Hind wing pale yellow. Underside of fore wing yellow, with a patch of brown suffusion at middle of termen.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

557 *b*. **Macaduma foliacea.** (Plate XXX. fig. 18.)

Macaduma foliacea, Roths. Nov. Zool. xix. p. 235 (1912).

♂. Head and thorax chestnut-brown; abdomen fuscous black, the base paler, the anal tuft yellowish. Fore wing chestnut-brown; an oblique dark-brown medial line, somewhat incurved at middle; the costal lobe blackish, the dark postmedial line arising from it, oblique to vein 6, then erect and sinuous; the termen suffused with dark brown; the cilia black-brown from apex to just below the lobe at middle, white at tips in the excision below apex and wholly white in the excision above tornus. Hind wing with the basal half brownish white, the terminal half fuscous brown.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*); Br. N. Guinea, Kumusi R. (*Meek*), 1 ♂. *Exp.* 22 millim. Type †♂ in Coll. Rothschild.

*557 *c*. **Macaduma caprimimoides.**

Lambula caprimimoides, Roths. Nov. Zool. xix. p. 215 (1912).

Fore wing with the costa more evenly arched, the termen evenly curved.

♂. Head and thorax chestnut-brown; antennæ whitish towards base; pectus, femora, and the whole hind legs yellowish white;

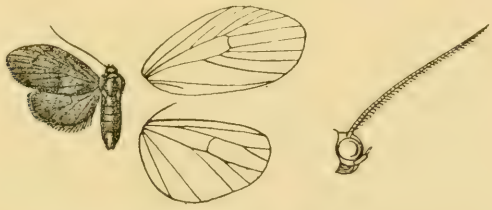

Fig. 163.—*Macaduma caprimimoides*, ♂. ¾.

abdomen fuscous black, the extremity of anal tuft and base of ventral surface yellowish white. Fore wing deep chestnut-brown; a patch of blackish suffusion on inner area near base; a sinuous

blackish medial line, interrupted in the cell, some blackish suffusion beyond it on inner area; postmedial line blackish, slightly and irregularly waved, oblique to vein 3, then incurved; a black spot above tornus. Hind wing fuscous brown.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

*558 *a*. **Macaduma tortricoides.** (Plate XXX. fig. 19.)

Macaduma tortricoides, Roths. Nov. Zool. xix. p. 236 (1912).

♂. Head, thorax, and abdomen very dark red-brown, the head and thorax with a few silvery scales; pectus, legs, and ventral surface of abdomen except at extremity whitish suffused with brown. Fore wing very dark red-brown irrorated with a few silvery scales; a large rounded yellow patch in and beyond end of cell from below costa to vein 3. Hind wing orange-yellow, the termen black-brown, expanding somewhat towards costa. Underside of fore wing dark brown with the yellow patch extending to costa.

Hab. Dutch N. Guinea, Up. Setekwa R., Snow Mts. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

*558 *b*. **Macaduma castaneofusca.** (Plate XXX. fig. 20.)

Macaduma, castaneofusca, Roths. Nov. Zool. xix. p. 236 (1912).

♂. Head and thorax very dark red-brown; abdomen whitish suffused with brown; pectus, legs, and ventral surface of abdomen pale red-brown. Fore wing very dark chocolate-brown tinged with grey and irrorated with a few silvery scales; an oblique dark postmedial striga from costa. Hind wing white faintly tinged with brown; the cilia reddish brown. Underside of fore wing grey-brown; the costal area of hind wing suffused with grey-brown.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

*558 *c*. **Macaduma castaneogriseata.** (Plate XXX. fig. 21.)

Macaduma castaneogriseata, Roths. Nov. Zool. xix. p. 237 (1912).

♀. Head and thorax deep chocolate-brown irrorated with a few silvery scales; tibiæ at extremities and tarsi ringed with white; pectus and abdomen grey-brown. Fore wing deep chocolate-brown thickly irrorated with grey-white and with a few silvery scales; antemedial line rather diffused, chocolate-brown, excurved to submedian fold and incurved at vein 1; a small blackish discoidal spot; postmedial line chocolate-brown, obliquely downcurved from

costa to vein 6, then erect and defined on outer side by grey-white; an indistinct chocolate-brown subterminal shade except towards inner margin; cilia whitish at tips. Hind wing pale grey-brown; the cilia darker towards apex. Underside of fore wing, the costal area of hind wing, and the terminal area except towards tornus chestnut-brown.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 30 millim. Possibly the female of *M. castaneofusca*.

*559 *a*. **Macaduma fuliginosa.** (Plate XXX. fig. 22.)

Macaduma fuliginosa, Roths. Nov. Zool. xix. p. 235 (1912).

♀. Head, thorax, and abdomen fuscous brown. Fore wing fuscous brown, the costal edge and termen with a cupreous tinge. Hind wing fuscous brown, the termen with a cupreous tinge.

Hab. Br. N. Guinea, Kumusi R. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 20 millim.

*560 *a*. **Macaduma pallicosta.** (Plate XXX. fig. 23.)

Macaduma pallicosta, Roths. Nov. Zool. xix. p. 236 (1912).

♂. Head and tegulæ grey-brown; thorax very dark red-brown; abdomen fuscous brown; pectus, legs, and ventral surface of abdomen grey-brown. Fore wing very dark red-brown shading to pale red-brown on terminal area, the costal area whitish tinged with brown to middle where it ends obliquely, with a rufous spot on costa just before the end of the pale area. Hind wing grey-brown, the costal and inner areas whitish. Underside of fore wing grey-brown with the apical area whitish.

Hab. Queensland, Mackay, type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

560 *b*. **Macaduma albisparsa**, n. sp. (Plate XXX. fig. 24.)

♂. Head and thorax pale red-brown; abdomen fuscous brown, the anal tuft and ventral surface whitish tinged with rufous. Fore wing pale red-brown irrorated with white; a darker patch on inner half of basal area; traces of a postmedial brown line oblique to vein 4, then inwardly oblique. Hind wing yellowish, the terminal area suffused with red-brown, traces of a curved dark postmedial line; the underside with the costal area suffused with red-brown.

Ab. 1. Fore wing with discoidal spot and dark medial line from cell to inner margin.—Kuranda.

Hab. Br. N. Guinea, Kumusi R. (*Meek*), 1 ♂ type; Queensland, Kuranda (*Dodd*), 1 ♂. *Exp.* 20 millim.

*560 *c*. **Macaduma simplex.** (Plate XXX. fig. 25.)

Nepita simplex, Pag. Zoologica, xii. 29, p. 60 (1900).

♂. Head and thorax chocolate-brown; abdomen fuscous with the anal tuft yellow. Fore wing uniform chocolate-brown. Hind wing pale yellowish, the costal area tinged with brown.

Hab. New Britain (*Ribbé*), type † ♂ in Coll. Rothschild. *Exp.* 16 millim.

*560 *d*. **Macaduma reducta.** (Plate XXX. fig. 26.)

Macaduma rufocostalis, reducta, Roths. Nov. Zool. xix. p. 236 (1912).

♀. Head and thorax reddish brown tinged with grey; abdomen grey-brown. Fore wing pale red-brown tinged with grey, the costa towards apex and apical part of termen with a cupreous tinge. Hind wing and underside of fore wing grey-brown.

Hab. D'Entrecasteaux Is., Fergusson I. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 18 millim.

*560 *e*. **Macaduma bipunctata.**

Macaduma bipunctata, Beth.-Baker, Nov. Zool. xi. p. 421, pl. v. f. 29 (1904).

♀. Head and thorax red-brown tinged with purplish grey; pectus, coxæ, and part of legs bright yellow; abdomen pale brownish, the ventral surface bright yellow. Fore wing red-brown suffused with purple-fuscous; two white points above median nervure in lower end of cell. Hind wing pale yellow, the costal and terminal areas slightly tinged with brown.

Hab. Br. N. Guinea, Dinawa, 4000′ (*Pratt*), type † ♀ in Coll. Bethune-Baker. *Exp.* 28 millim.

*560 *f*. **Macaduma aroa.** (Plate XXX. fig. 27.)

Macaduma aroa, Beth.-Baker, Nov. Zool. xi. p. 421 (1904).

♂. Head and thorax red-brown with a slight purplish gloss; palpi below, pectus, and legs fulvous orange; abdomen fulvous yellow, pale at base. Fore wing red-brown with a slight silvery gloss; the basal area rather darker, the medial area rather paler; an almost medial diffused red-brown line, angled outwards on median nervure, then oblique and with a whitish striga before it in cell; a red-brown discoidal spot with whitish points before and beyond it; postmedial line red-brown, minutely dentate except towards costa, oblique from costa to vein 4, then incurved; faint traces of a subterminal line oblique from costa to vein 2. Hind wing yellowish white, the termen and cilia tinged with red-brown from apex to vein 2.

Hab. Br. N. Guinea, Up. Aroa R. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

560 *g*. **Macaduma castanea.** (Plate XXX. fig. 28.)

Macaduma castanea, Hmpsn. A. M. N. H. (8) viii. p. 403 (1911).

♂. Head, thorax, and abdomen chestnut-brown; pectus, ventral surface of abdomen, and anal tuft yellow. Fore wing chestnut-brown, the terminal half slightly tinged with grey and with a faint diffused curved chestnut postmedial band. Hind wing yellow, the terminal area tinged with red-brown narrowing to tornus. Underside of fore wing with the truncate apical part of costa yellow.

Hab. Dutch N. Guinea, Fak-fak (*Pratt*), 1 ♂ type, Oetakwa R., Snow Mts. (*Meek*), 1 ♂. *Exp.* 28 millim.

560 *h*. **Macaduma rufa**, n. sp. (Plate XXX. fig. 29.)

♂. Head and thorax bright rufous; pectus, legs, and abdomen paler rufous. Fore wing with the basal half bright rufous with curved outer edge, the terminal half paler rufous; a diffused curved rufous postmedial line; the costa towards apex and apical part of termen deep rufous. Hind wing whitish tinged with rufous. Underside of both wings pale rufous.

Hab. Dutch N. Guinea, Up. Setekwa R., Snow Mts. (*Meek*), 2 ♂ type, Oetakwa R. (*Meek*), 1 ♂. *Exp.* 22 millim.

*560 *i*. **Macaduma quercifolia.** (Plate XXX. fig. 30.)

Macaduma quercifolia, Roths. Nov. Zool. xix. p. 237 (1912).

♂. Head and thorax bright red-brown; pectus and abdomen whitish tinged with brown. Fore wing bright red-brown; the costal lobe with a large tuft of blackish hair; an oblique diffused red-brown line from the costal lobe to inner margin towards base, a slight waved line just beyond it from cell to inner margin; postmedial line red-brown, excurved below costa, then erect; cilia whitish at tips below apex and towards tornus. Hind wing white with a faint rufous tinge. Underside of fore wing brownish white with a rounded patch of black suffusion below the costal lobe.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

560 *j*. **Macaduma rufoumbrata.** (Plate XXX. fig. 31.)

Macaduma rufoumbrata, Roths. Nov. Zool. xix. p. 237 (1912).
Macaduma rufoumbrata, indistincta, Roths. Nov. Zool. xix. p. 237 (1912)

♂. Head and thorax deep chocolate-brown; abdomen whitish tinged with brown; mid and hind legs and ventral surface of abdomen rufous, the tarsi dark brown with whitish rings. Fore wing deep chocolate-brown glossed with leaden grey; a diffused inwardly oblique deep chocolate-brown antemedial line; a minute black discoidal spot with white point on its inner side; post-

medial line chocolate-brown, dentate, bent outwards at vein 7 and oblique below vein 4; a slight subterminal chocolate-brown shade expanding triangularly at costa; cilia whitish at tips below apex. Hind wing whitish, the terminal area tinged with red-brown except towards tornus; cilia darker brown towards apex. Underside of fore wing, the costal area of hind wing, and the terminal area except towards tornus chestnut-brown.

Ab. 1. *indistincta*. Head and thorax bright red-brown; fore wing paler and much brighter red-brown.

♀. Head and thorax greyer brown; fore wing greyer brown with the markings indistinct.

Ab. 2. Fore wing with the medial area darker, the lines istinct.

Ab. 3. Fore wing pale reddish brown tinged with grey, the lines indistinct.

Ab. 4. Fore wing with the basal half of costal area irrorated with white, the terminal area irrorated with white extending to the postmedial line on inner half; a small white spot sometimes present beyond the discoidal spot; cilia white at tips throughout.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), 1 ♀, type † ♂, ♀ in Coll. Rothschild; Br. N. Guinea, Angabunga R. (*Meek*), type † ♂, ♀ *indistincta* in Coll. Rothschild. *Exp.* 26–32 millim.

560 *k*. **Macaduma costimacula.** (Plate XXX. fig. 32.)

Nacaduba costimacula, Beth.-Baker, Nov. Zool. xv. p. 194 (1908).

♂. Head and thorax very deep red-brown; vertex of head with white band; basal half of antennæ whitish; outer edge of patagia white; pectus whitish; legs rufous, the fore tarsi brown ringed with whitish; abdomen whitish, the terminal half tinged with brown, the lateral tufts and ventral surface with rufous. Fore wing whitish suffused and irrorated with rufous except basal part of costa and inner margin; a black-brown triangular mark on costa just before middle; a black discoidal point; traces of a diffused antemedial line from submedian fold to inner margin; an indistinct curved minutely dentate brown postmedial line and slight diffused oblique subterminal band. Hind wing yellowish white, the apical area and termen to submedian fold tinged with rufous. Underside of fore wing and costal area of hind wing suffused with rufous.

Hab. Br. N. Guinea, Owgarra (*Meek*), 1 ♂. *Exp.* 32 millim. Type † ♂ in Coll. Bethune-Baker.

*561 *b*. **Macaduma lichenia.** (Plate XXX. fig. 33.)

Macaduma lichenia, Roths. Nov. Zool. xix. p. 238 (1912).

♂. Head and thorax white, the tegulæ, patagia, and dorsum of thorax with patches of black scales; antennæ dark brown; pectus,

legs, and abdomen white tinged with red-brown, the tarsi black ringed with white. Fore wing with the costa excised from near base to beyond middle, then arched; white irrorated with dark brown and blackish, the medial area except towards costa and the costal and terminal areas towards apex suffused with bright red-brown; a subbasal black point below costa and some short streaks on medial part of costa; traces of a dentate medial blackish line from below costa to inner margin; an indistinct oblique somewhat dentate postmedial line and an indistinct waved subterminal line; the costa towards apex black with white points on it; a fine red-brown terminal line and a line through the cilia. Hind wing white tinged with rufous. Underside of fore wing white tinged with rufous; hind wing with brownish subterminal line from costa to vein 4.

♀. Head and thorax red-brown mixed with whitish and with a few silvery scales, the antennæ blackish with some silvery blue near base; fore wing with the costa lobed at middle, then excised to apex, suffused with chocolate-brown to beyond the medial line and on apical part of costal area and irrorated with a few silvery scales, subbasal and antemedial black patches on costa, a whitish discoidal bar defined by dark brown, cilia black at base towards apex and at tips at middle; hind wing dark reddish brown, the cilia whitish except at base; underside of fore wing dark reddish brown with the apex white; hind wing whitish suffused with reddish brown.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* 20 millim.

*561 *c*. **Macaduma macrosema**, n. sp. (Plate XXX. fig. 34.)

Lambula sericeoides, Roths. Nov. Zool. xix. p 212, ♀ (nec ♂).

♂. Head, tegulæ, and shoulders pure white; palpi, frons, and antennæ red-brown; thorax dark red-brown with two slight white marks on prothorax and a white spot on metathorax; pectus, legs, and abdomen fulvous yellow, the fore and mid tibiæ and tarsi brownish. Fore wing pure white; the costal edge brown; a large dark reddish brown patch from below costa to inner margin, expanding and rounded above, narrowing below, connected at vein 2 with the broad postmedial band, rounded and narrowing above to costa, the outer edge of the band connected with an elliptical subterminal patch between veins 8 and 2; cilia with some brown at tips at middle. Hind wing fulvous yellow, the apical part of terminal area tinged with brown. Underside of fore wing dark brown, the costa towards base and apex ochreous, the cilia white towards apex.

Hind wing with veins 3, 4 very shortly stalked.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

*561 *d*. **Macaduma picroptila.**

Macaduma picroptila, Turner, ined.

Fore wing with the termen excised from apex to tornus.

♂. Head and thorax rufous; pectus and legs brownish ochreous; abdomen fuscous, the base of dorsum rufous, the anal tuft brownish ochreous. Fore wing rufous; two black points on costa before the

Fig. 164.—*Macaduma picroptila*, ♂. ½.

excision and traces of points on the excised part. Hind wing fuscous brown with short rufous fasciæ from base on median nervure and vein 1.

Hab. Queensland, Brisbane, type † ♂ in Coll. Turner. *Exp.* 24 millim.

561 *e*. **Macaduma cretacea**, n. sp. (Plate XXX. fig. 35.)

♂. Head and thorax brownish white, the frons, palpi, pectus, and legs reddish brown; abdomen grey-white. Fore wing brownish white; a subbasal black point on costa; an inwardly oblique antemedial series of six black points; a postmedial black point on costa followed by a series of five minute points, excurved below costa; the terminal area slightly irrorated with blackish; a red-brown spot on costa before apex, a black spot before termen at discal fold, and some black striæ on termen; cilia with black marks at tips at apex and discal fold. Hind wing brownish white; the underside with slight discoidal spot.

Hab. Formosa, Kanshirei (*Wileman*), 1 ♂ type. *Exp.* 14 millim.

*561 *f*. **Macaduma albida.** (Plate XXX. fig. 36.)

Eurosia albida, Roths. Nov. Zool. xx. p. 193 (1913).

♀. Head, thorax, and abdomen pure white. Fore wing white slightly irrorated with pale red-brown and with slight red-brown postmedial striga from costa. Hind wing white very faintly tinged with red-brown. Underside of fore wing suffused with red-brown.

Hab. Br. N. Guinea, Milne Bay (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 14 millim. This may be the female of *M. albata*, no. 561 *g*.

Page 268. Under **OCROSIA** insert:—

Type.
Tampea, Snell. Tijd. v. Ent. xl. p. 226 (1897) ..... *reversa*,

which has precedence.

562. **Tampea reversa**, insert (syn.):—

Tampea lithosioides, Snell. Tijd. v. Ent. xl. p. 226 (1897).

Genus **PROSICCIA**, nov.

Type, *P. albescens*.

Proboscis fully developed; palpi upturned, slender, reaching to about vertex of head; frons smooth; antennæ of female ciliated; tibiæ with the spurs long. Fore wing narrow, the costa arched towards base, the apex rounded, the termen evenly curved; vein 2 from middle of cell, curved at base, 3 from angle; 4, 5 stalked; 6 from below upper angle; 7, 8, 9 stalked, 7 from beyond 9; 10, 11 from cell, 11 curved. Hind wing with vein 2 from towards angle of cell; 3, 4 stalked, 5 absent; 6, 7 stalked; 8 from middle of cell.

In key differs from *Areva* in the fore wing having vein 7 from 8 beyond 9.

*564 *a*. **Prosiccia albescens.**

Pasteosia albescens, Roths. Nov. Zool. xix. p. 228 (1912).

♀. Head and thorax ochreous white tinged with pale red-brown; abdomen ochreous white. Fore wing ochreous white irrorated with red-brown; an indistinct brown antemedial line angled outwards on subcostal nervure and in submedian fold, then oblique to inner

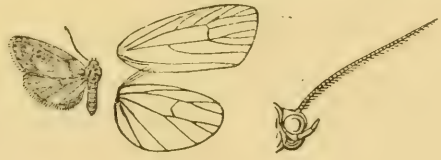

Fig. 165.—*Prosiccia albescens*, ♀. ½.

margin; a small blackish spot in middle of cell and two on disco-cellulars and a point at origin of vein 2; indistinct diffused curved postmedial and subterminal brown lines, and a terminal series of obscure points. Hind wing ochreous white tinged with reddish brown. Underside of fore wing pale red-brown.

Hab. Br. N. Guinea, Angabunga R. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 24 millim.

Genus **ACCO**.

Type.

Acco, Beth.-Baker, Nov. Zool. xi. p. 418 (1904) ..... *bicolora*.

Proboscis fully developed; palpi small, upturned and not reaching to vertex of head, fringed with hair in front; antennæ of male ciliated, the base of shaft fringed with scales above. Fore wing triangular; the cell extremely short; veins 2 and 4 from angle of cell, 3, 4 being coincident; 5 from just above angle; 6, 7, 10, 11 stalked, 8, 9 absent; a large patch of rough androconia on middle of inner area and fringe of long hair from inner margin. Hind wing with the base of costal area lobed, the apical part truncate; the cell extremely short; veins 2 and 4 from angle, 3, 5 coincident with 4; 6, 7 coincident; a small elliptical patch of androconia at end of cell on upperside; the inner area with a fold containing a fringe of long hair.

In key differs from *Lymantrioïdes* in the fore wing having vein 6 stalked with 7, 10, 11.

*566 *a*. **Acco bicolora**.

Acco bicolora, Beth.-Baker, Nov. Zool. xi. p. 418, pl. v. f. 21 (1904).

♂. Head, thorax, and abdomen fuscous black; tegulæ white.

Fig. 166.—*Acco bicolora*, ♂. ½.

Fore wing fuscous, the costal area, and apical area down to tornus white; the fringe on inner margin ochreous. Hind wing fuscous.

Hab. Br. N. Guinea, Dinawa, 4000′ (*Pratt*), type † ♂ in Coll. Bethune-Baker. *Exp.* 18 millim.

Genus **LAMBULOSIA**, nov.

Type, *L. aurantiaca*.

Proboscis fully developed; palpi upturned, reaching to about middle of frons, slender, frons smooth; antennæ of male ciliated; tibiæ with the spurs moderate. Fore wing with the costa rather strongly arched, the apex rounded, the termen evenly curved; vein 2 from middle of cell, curved towards base; 3, 4 stalked; 5 from angle; 6 from below upper angle; 7, 8 stalked, 9 absent; 10, 11 from cell, the latter anastomosing with 12. Hind wing with vein 2 from near angle of cell; 3 and 5 stalked, 4 absent; the discocellulars oblique; veins 6, 7 coincident; 8 from middle of cell.

In key differs from *Ardonissa* in the fore wing having veins 3, 4 stalked, the hind wing with vein 5 stalked with 3.

*568 *a*. **Lambulosia aurantiaca**. (Plate XXXI. fig. 1.)

Lambula aurantiaca, Roths. Nov. Zool. xix. p. 214 (1912).

♂. Head and thorax pale fulvous yellow; antennæ blackish except towards base; fore tibiæ and tarsi blackish in front;

abdomen black-brown, the base and extremity pale yellow. Fore wing pale fulvous yellow; the costal area suffused with fuscous towards base; antemedial line fuscous, forming a small spot at costa, obliquely curved to median nervure, then erect; postmedial line fuscous, forming a small spot at costa, obliquely downcurved to vein 6, then excurved. Hind wing pale buff. Underside of fore wing with the costal half suffused with brown.

Ab. 1. Head, thorax, and wings pale yellow.

Ab. 2. Similar, but fore wing with the medial area suffused with brown.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

*571 *a*. **Darantasia mesosema**, n. sp. (Plate XXXI. fig. 2.)

♀. Head and thorax orange-yellow, the frons, patagia, and prothorax with black patches, the tegulæ with black bars; antennæ black; fore tibiæ and tarsi and the mid and hind tarsi at extremities black; abdomen orange-yellow, the basal half of dorsum black-brown. Fore wing black-brown; the base and a fascia below basal half of costa orange-yellow; an orange-yellow fascia on vein 1 from near base to near tornus; a streak on median nervure towards end of cell; an elongate patch below costa beyond middle, a spot beyond lower angle of cell, and a wedge-shaped subterminal band from below costa to above tornus. Hind wing black-brown with an irregularly rounded orange-yellow patch from below middle of costa to above tornus. Underside of fore wing without the fascia on vein 1 or streak on median nervure.

Hab. Batchian (*Doherty*); Obi, Laiwui (*Doherty*), type † ♀ in Coll. Rothschild. *Exp.* 22–26 millim.

575 *a*. **Darantasia pervittata.** (Plate XXXI. fig. 3.)

Darantasia pervittata, Hmpsn. A. M. N. H. (7) xi. p. 344 (1903).

♀. Head and thorax orange-yellow; antennæ brownish; abdomen black, the terminal segments orange. Fore wing brown suffused with purple; the base orange-yellow with irregular outer edge emitting a fascia on costa to before middle and another in submedian fold to near termen; a very obliquely curved postmedial band from just below costa to vein 2, tapering at extremities. Hind wing brown; a large orange-yellow patch from just below middle of costa to near termen at submedian fold, on underside produced towards base below the cell.

Hab. Dutch N. Guinea, Kapaur (*Doherty*), 1 ♀ type. *Exp.* 24 millim.

*575 *b*. **Darantasia cyanoxantha**, n. sp. (Plate XXXI. fig. 4.)

♂. Head and thorax orange-yellow; abdomen orange-yellow with dorsal black-brown patch on medial segments. Fore wing black-brown suffused with brilliant metallic blue; the base orange-

yellow with incurved outer edge; the apical area orange-yellow from middle of costa to just before termen at vein 3, leaving the termen and cilia dark. Hind wing orange-yellow suffused with dark brown except on terminal area, the cilia brown from apex to vein 2. Underside of fore wing brown, the base yellow extending on inner area to near middle, the apical area yellow.

♀. Abdomen wholly yellow; hind wing brown with wedge-shaped yellow patch just before termen from just below costa to vein 3.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* 18 millim.

575 *c*. **Darantasia ecxanthia**, n. sp. (Plate XXXI. fig. 5.)

♀. Head and thorax orange-yellow; abdomen black-brown, the base and extremity orange-yellow. Fore wing fuscous brown suffused with leaden blue-grey, the base orange-yellow, emitting short fasciæ on costa and inner margin; an orange-yellow patch in middle of cell, a patch at middle of inner margin, and a patch below end of cell; the terminal half of costal area and the terminal area broadly orange-yellow; a blue-black spot on costa above end of cell and a blue-black terminal line; cilia fuscous brown. Hind wing black-brown; the underside with the basal half of costal area yellow.

Hab. Goodenough I. (*Meek*), 2 ♀ type. *Exp.* 18 millim.

*575 *d*. **Darantasia apicata**, n. sp.

Hind wing of male without swelling on subcostal nervure.

♂. Head and thorax yellow; antennæ brownish except at base; abdomen dark brown, the base, extremity, and ventral surface yellow. Fore wing dark cupreous red-brown; the base yellow; a

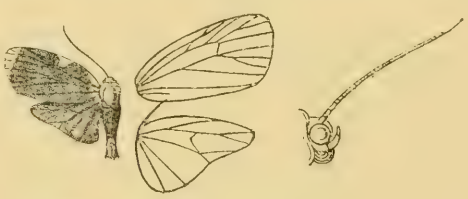

Fig. 167.—*Darantasia apicata*, ♂. ⅔.

conical yellow spot on costa at middle; the terminal area yellow from apex to vein 4. Hind wing reddish brown; the extreme base yellow; the termen narrowly yellow except towards apex and tornus.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

*575 *e*. **Darantasia cyanifera**, n. sp. (Plate XXXI. fig. 6.)

♂. Head and thorax yellow; fore tibiæ and tarsi brown; abdomen yellow with dorsal black-brown patch on medial segments. Fore wing with the basal area yellow with oblique sinuous outer edge, the rest of wing black-brown suffused with brilliant metallic blue leaving the costal edge yellow and the apical area yellow narrowing to a point at vein 3 and with curved slightly waved inner edge. Hind wing yellow, the costal area broadly suffused with fuscous brown from middle to apex, the cilia beyond it yellow. Underside of fore wing fuscous brown with the basal and apical areas yellow.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

*577 *a*. **Heliosia eurochrysa**, n. sp. (Plate XXXI. fig. 7.)

♀. Head and tegulæ golden yellow; antennæ, thorax, and abdomen dark red-brown. Fore wing golden yellow; the base dark red-brown; the terminal area bright red-brown, narrowing to tornus and defined on inner side by an incurved blackish line suffused with metallic blue. Hind wing reddish brown. Underside of fore wing red-brown.

Hab. Br. N. Guinea, Kumusi R. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 14 millim.

579 *a*. **Heliosia micra**. (Plate XXXI. fig. 8.)

Heliosia micra, Hmpsn. A. M. N. H. (7) xi. p. 345 (1903).

♂. Head, thorax, and abdomen pale yellow. Fore wing orange-yellow with indistinct waved antemedial, postmedial, and subterminal lines formed of dark scales. Hind wing pale yellow.

Hab. Queensland, Cedar Bay (*Meek*), 1 ♂ type. *Exp.* 12 millim.

*579 *b*. **Heliosia aurantia**. (Plate XXXI. fig. 9.)

Rhagophanes aurantia, Roths. Nov. Zool. xix. p. 218 (1912).

♂. Head and thorax deep orange-yellow; pectus, legs, and abdomen pale yellow. Fore wing deep orange-yellow sparsely irrorated with black scales; a blackish subbasal bar from costa; antemedial line rather diffused, blackish, angled inwards in cell and on vein 1; a narrow diffused incurved blackish medial band; postmedial line indistinct, diffused, blackish, angled inwards below costa, then excurved; an indistinct diffused blackish subterminal line, excurved below costa and obsolete below middle and towards inner margin. Hind wing pale yellow. Underside of fore wing pale yellow.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 16 millim.

*579 *c*. **Heliosia suffusa.** (Plate XXXI. fig. 10.)

Palæopsis suffusus, Roths. Nov. Zool. xx. p. 219 (1913).

♂. Head and thorax white, the dorsum of thorax suffused with rufous; antennæ tinged with rufous except the basal joint; legs slightly tinged with rufous; abdomen white, the anal tuft tinged with ochreous. Fore wing white suffused with rufous, the base and costal area to near apex whiter; antemedial, medial, and postmedial brown points on costa; a black-brown medial bar from submedian fold to inner margin; a diffused curved white line arising from just beyond the postmedial point on costa and excurved to near termen at middle, the costa beyond it and the termen deeper rufous. Hind wing creamy white.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 16 millim.

*579 *d*. **Heliosia atriplaga**, n. sp. (Plate XXXI. fig. 11.)

♂. Head and thorax pale ochreous mixed with some reddish brown; abdomen pale ochreous. Fore wing pale ochreous irrorated with red-brown except on inner area to beyond middle, the terminal area more thickly irrorated; subbasal patches of dark irroration in the cell and on inner margin; a black streak on median nervure to vein 2, then oblique on vein 2 to a black patch on inner area just beyond middle; some blackish scales on costa beyond middle; the inner edge of the darker terminal area curved. Hind wing pale ochreous yellow.

Hab. Loyalty Is., Lifu, type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

579 *e*. **Heliosia alba**, n. sp. (Plate XXXI. fig. 12.)

♂. Head and thorax white; antennæ and palpi reddish brown; legs tinged with red-brown, the tarsi brown ringed with white; abdomen white tinged with red-brown. Fore wing white slightly irrorated with brown; a subbasal black spot on costa; a triangular antemedial black patch on costa; an elliptical black discoidal spot with spot above it on costa; a rather diffused dark brown spot on costa before apex and slighter antemedial spot at discal fold. Hind wing white tinged with brown.

Hab. Formosa, Kanshirei (*Wileman*), 1 ♂ type. *Exp.* 16 millim.

*579 *f*. **Heliosia charopa.**

Heliosia charopa, Turner, Tr. R. Soc. S. Austr. xxviii. p. 212 (1904).

Palpi porrect; hind with veins 3, 4 stalked.

♂. Head and tegulæ orange, 3rd joint of palpi, lower part of frons and antennæ blackish; patagia and thorax blackish; legs orange, the fore and mid tibiæ above and the tarsi blackish; abdomen black, the basal segment edged with orange, the terminal segment orange, the ventral surface with orange bands on terminal segments.

Fore wing orange; the costal edge black to the black medial band which is slightly excurved in cell; a subterminal band from costa before apex to tornus, its outer edge angled outwards below costa

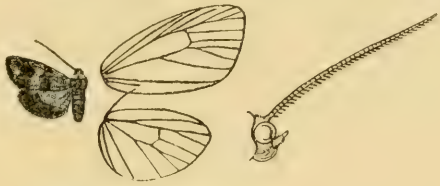

Fig. 168.—*Heliosia charopa*, ♂. ½.

and its inner inwards in discal fold; cilia black. Hind wing orange, the terminal third black, the outer edge of orange area excurved at middle; a slight orange apical spot.

Hab. QUEENSLAND, Townsville, type † ♂ in Coll. Turner. *Exp.* 22 millim.

Genus **MEGALOBOSIA**, nov.

Type, *M. recurviloba.*

Proboscis fully developed; palpi upturned, slender, reaching to about middle of frons; antennæ of male ciliated; tibiæ with the spurs long. Fore wing long and narrow, the apex rounded, the termen evenly curved, the inner margin arched near base then somewhat excised to tornus, the costa of male with very large lobe recurved over upperside to near inner margin and extending from near base to well beyond middle, and a patch of androconia on underside at lower angle of cell; the cell short; vein 2 from near angle of cell; 3, 4 from angle; 5 absent; 6 from upper angle; 7, 8, 9 stalked, 7 from beyond 9; 10, 11 from cell; 12 curved up to the lobe. Hind wing ample, the costa arched, then excised at apex; vein 2 from middle of cell; 3, 4 stalked; 5 from above angle; 6, 7 coincident; 8 from middle of cell and bent downwards towards extremity.

In key differs from *Stenoscaptia* in the hind wing having veins 3, 4 stalked.

*579*g*. **Megalobosia recurviloba.**

Garudinodes recurviloba, Roths. Nov. Zool. xix. p. 232 (1912), ♂.

♂. Head, tegulæ, and prothorax yellowish white, the palpi,

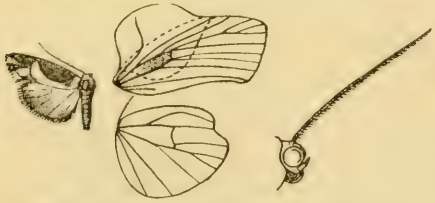

Fig. 169.—*Megalobosia recurviloba*, ♂. ½.

antennæ, and rest of thorax deep cupreous brown; pectus and legs yellowish white, the tibiæ and tarsi tinged with red-brown; abdomen

whitish. Fore wing yellowish white; the basal costal area and the lobe deep cupreous brown; a large triangular cupreous brown patch from costa towards apex, its apex touching the apex of a similar patch from inner margin at middle of wing; a triangular cupreous brown patch from middle of termen. Hind wing white faintly tinged with red-brown, the terminal area below the excised apex rather more strongly tinged; the underside with the costal area suffused with red-brown.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

* 581 *a*. **Halone furcifascia**, n. sp. (Plate XXXI. fig. 13.)

Garudinodes recurviloba, Roths. Nov. Zool. xix. p. 232 (1912), ♀ (nec ♂).

♂. Head, tegulæ, and prothorax yellowish white, the palpi, antennæ, and rest of thorax deep cupreous brown; abdomen whitish; pectus, legs, and ventral surface of abdomen whitish tinged with red-brown. Fore wing deep cupreous brown; the inner area with large yellowish white patch from near base to middle, met by an oblique rather diffused band from middle of costa to vein 1 near base; an oblique yellowish white band from costa beyond middle to vein 6 with a somewhat dentate dark line from it to inner margin, to which it is bent outwards, and with a rather triangular yellowish white patch on inner area beyond the line extending to tornus; an oblique yellowish white bar from apex; the cilia and termen yellowish white from below apex to vein 4. Hind wing white, the apical area faintly tinged with red-brown; the underside with the costal area tinged with red-brown.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

583 *a*. **Halone coryphœa**. (Plate XXXI. fig. 14.)

Halone coryphœa, Turner, ined.
Halone sobria; ab. 1, Hmpsn. Cat. Lep. Phal. B.M. ii. p. 278.

Hab. Queensland, Stanthorp, 5 ♂, 1 ♀, Brisbane; Victoria, Melbourne (*Lucas*), 1 ♂. *Exp.* 24 millim.

586 *a*. **Halone flavinigra**. (Plate XXXI. fig. 15.)

Halone flavinigra, Hmpsn. A. M. N. H. (7) xix. p. 232 (1907).

♂. Head, thorax, and abdomen fuscous, the vertex of head, base of shaft of antennæ, and tegulæ yellow. Fore wing orange-yellow; a black patch at base with irregular oblique outer edge; a post-medial black band angled inwards below cell and with rather dentate edges; some diffused fuscous before termen. Hind wing pale fuscous.

Hab. Madras, Palni Hills, 6000′ (*W. H. Campbell*), 1 ♂ type. *Exp.* 20 millim.

*586 *b*. **Halone ebæa.** (Plate XXXI. fig. 16.)

Halone ebæa, Turner, ined.

♂. Head and thorax white; abdomen pale fuscous, the anal tuft white. Fore wing white irrorated with a few brown scales; a medial series of four black points, on costa, in cell, submedian fold, and on inner margin, angled at the point in cell; postmedial points on costa, vein 5, submedian fold, and inner margin; terminal points at discal and submedian folds. Hind wing pale fuscous; underside of fore wing suffused with pale fuscous.

Hab. Queensland, Geraldton, type † ♂ in Coll. Turner. *Exp.* 12 millim.

*588 *a*. **Garudinistis variegata.**

Stictosia variegata, Roths. Nov. Zool. xix. p. 245 (1912).

Fore wing of male without fringe of hair below the cell; the discocellulars present; vein 6 from well below upper angle; hind wing with veins 3, 4 shortly stalked; 6, 7 on a long stalk.

♂. Head and thorax golden yellow, the metathorax pale red; abdomen whitish tinged with yellow, the ventral surface yellow. Fore wing golden yellow; a subbasal pale red patch from cell to inner margin, some silvery-blue scales near its outer edge; a

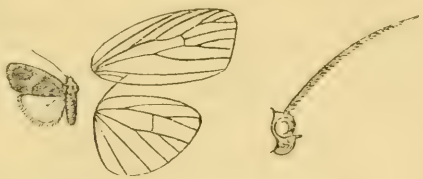

Fig. 170.—*Garudinistis variegata*, ♂. ½.

rounded antemedial pale red patch from below costa to discal fold, where it is conjoined to a medial patch on inner area, with some silvery-blue scales near its outer edge; a broad curved pale red band suffused with silvery-blue scales on terminal area, leaving the costa and apex yellow. Hind wing and underside pale yellow.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

589 *a*. **Stenoscaptia phlogozona.**

Stenoscaptia phlogozona, Turner, Tr. R. Soc. S. Austr. xxviii. p. 212 (1904).

Fore wing of male with a brush of hair arising from a small fovea above middle of vein 1 on underside; hind wing with a small patch of androconia on upperside below base of vein 8 which is sinuous, the discocellulars long and straight.

Head and tegulæ golden yellow; thorax purple; abdomen yellow-

brown; pectus, legs, and ventral surface of abdomen yellow. Fore wing purple; a broad oblique golden yellow medial band, very slightly constricted at middle; a terminal yellow band, its inner

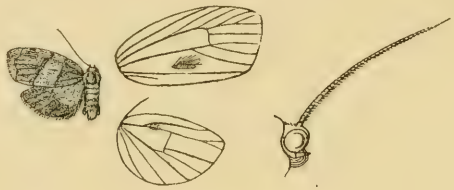

Fig. 171.—*Stenoscaptia phlogozona*, ♂. ⅔.

edge sinuous and indented at vein 6, and ending in a point above tornus. Hind wing with the basal half yellowish; the terminal half reddish brown with the cilia yellow.

Hab. D'Entrecasteaux Is., Fergusson I. (*Meek*), 1 ♀; N. Australia, Port Darwin, type † ♂ in Coll. Turner. *Exp.* 16 millim.

589 *b*. Stenoscaptia aroa.

Garudinistis aroa, Beth.-Baker, Nov. Zool. xi. p. 422, pl. iv. f. 37 (1904).

♂. Head, tegulæ, and prothorax golden yellow; palpi red-brown; outer part of tegulæ, patagia, and metathorax red-brown tinged with purple; pectus and legs ochreous, the fore and mid tibiæ brown; abdomen brown, the basal segments ochreous. Fore wing with the basal area red-brown shot with purple and bounded by an oblique dark waved line; medial area golden yellow followed by a red-brown area shot with purple and bounded by minutely waved darker lines, rounded above at costa and leaving a rather narrow golden yellow terminal band from apex to vein 2. Hind wing ochreous with broad brown terminal band.

Hab. Dutch N. Guinea, Setekwa R., Snow Mts. (*Meek*), 1 ♂; Br. N. Guinea, Up. Aroa R. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

*589 *c*. Stenoscaptia niveiceps. (Plate XXXI. fig. 17.)

Chrysallactis niveiceps, Roths. Nov. Zool. xx. p. 194 (1913).

♂. Head and tegulæ pure white; antennæ and thorax bright red-brown; palpi red-brown; abdomen pale red-brown; pectus, legs, and ventral surface of abdomen yellow, the fore femora and base of tibiæ red-brown. Fore wing golden yellow; the base bright red-brown defined on outer side by an oblique dark line; the terminal area rufous defined on inner side by a slightly incurved and very slightly waved black line glossed with silvery blue; a deeper rufous subterminal shade, its outer edge excurved below costa and at middle; a series of minute deep rufous streaks

on the extremities of the veins. Hind wing whitish tinged with rufous. Underside of fore wing suffused with rufous.

Hab. Br. N. Guinea, Collingwood Bay, Haidana (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

590. Byrsia aurantiaca.

Larva. Piepers, Tijd. v. Ent. xlviii. p. 148.

Ochreous, greenish except the head and two anterior and posterior somites, the 3rd and 10th somites dorsally black, the black on 3rd somite emitting lateral black streaks on the two following somites; the black segments with warts covered with minute points; each somite with yellowish-white transverse lines; hair white. Food-plant, *Mangifera indica.*

591. Byrsia dotata.

Subsp. 1. *celebensis*, Roths. Nov. Zool. viii. p. 422 (1901).

The form described and figured on page 282 as *B. dotata.* The true *dotata* from Batchian is the form with the black area at base of fore wing and costal fascia wider, the orange-red subterminal band narrower and reduced towards inner margin; hind wing with the yellow extending to below the cell in both sexes.

Subsp. 2. *papuana*, Roths. Nov. Zool. viii. p. 423 (1901).

♂. Differs from the typical form in the subterminal orange-red band extending to inner margin near tornus. Hind wing with the black on termen on underside very narrow from vein 2 to tornus.

Hab. New Guinea, Kapaur (*Doherty*), Milne Bay (*Meek*), type† ♂ in Coll. Rothschild.

591 *a*. Byrsia latiplaga. (Plate XXXI. fig. 18.)

Byrsia latiplaga, Roths. Nov. Zool. xix. p. 238 (1912).
Byrsia latiplaga, ab. *reducta*, Roths. Nov. Zool. xix. p. 238 (1912).
Byrsia latiplaga, *pallidior*, Roths. Nov. Zool. xix. p. 238 (1912).

♂. Head, thorax, and abdomen black-brown; coxæ and tarsi except at extremities white; abdomen with the ventral surface white. Fore wing black; a conical orange-yellow antemedial patch from below costa to inner margin, its edges slightly sinuous; an orange-red subterminal band from below costa to just above tornus, its edges waved, rounded above and narrowing to a point below. Hind wing black tinged with red-brown; a conical orange-yellow patch from middle of costa to above tornus occupying fully half the wing; cilia black; the underside orange-yellow with a black-brown terminal line expanding into a patch at apex.

♀. Fore wing with the antemedial orange-yellow patch broader and more quadrate.

Ab. 1. *pallidior.* Fore wing with the antemedial patch golden yellow; hind wing with the patch golden yellow and not extending below submedian fold.

Ab. 2. *reducta*. Blacker; fore wing with the antemedial patch narrower, the subterminal band deeper red; hind wing with the patch not extending below submedian fold.

Hab. Dutch N. Guinea, Arfak Mts., Ninay Valley (*Pratt*), type † ♂ *pallidior* in Coll. Rothschild, Oetakwa R., Snow Mts. (*Meek*), type † ♀ in Coll. Rothschild; Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ *reducta* in Coll. Rothschild; Goodenough I. (*Meek*), 1 ♀. *Exp.* ♂ 24, ♀ 26 millim.

*591 *b*. Byrsia ornata.

Byrsia ornata, Roths. Nov. Zool. viii. p. 423 (1902).

Fore wing with veins 3, 4 shortly stalked.

♂. Black; patagia with yellow patches; tarsi and ventral surface of abdomen yellow. Fore wing with large golden yellow patch from near base to beyond middle and from inner margin to below costa, rounded above and its outer edge angled in discal and submedian

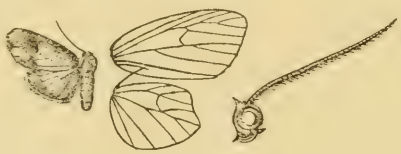

Fig. 172.—*Byrsia ornata*, ♂. ½.

folds; a deep orange subterminal band from below costa to tornus towards which it is attenuate, rounded above and with its edges minutely waved. Hind wing with orange-yellow triangular patch from costa, on which it extends from base to beyond middle, to submedian fold near termen; the underside with terminal patch from vein 5 to 2 followed by a narrow band to tornus.

Hab. New Guinea, Humboldt Bay (*Doherty*), type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

*591 *c*. Byrsia amœna. (Plate XXXI. fig. 19.)

Byrsia amœna, Roths. Nov. Zool. viii. p. 423 (1901).

♀. Head and thorax golden yellow; pectus and legs black; tarsi yellow; abdomen black, the anal tuft grey, whitish below. Fore wing golden yellow, the terminal area blue-black from costa beyond middle to inner margin near tornus; a scarlet subterminal band from below costa to vein 1, rounded above and attenuate below. Hind wing golden yellow with terminal black band narrowing from costa to a point at submedian fold, the cilia towards tornus and on inner margin black.

Hab. Solomon Is., Isabel I. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 20 millim.

Subsp. *guizonis*, Jord. Nov. Zool. xi. p. 443 (1904).

♀. Hind wing with the inner area black; the terminal band broad, narrowing somewhat towards tornus.

Hab. Solomon Is., Guizo I. (*Meek*), type † ♀ in Coll. Rothschild.

592 *a*. Neoscaptia flavicaput.

Neoscaptia flavicaput, Roths. Nov. Zool. xix. p. 239 (1912).

Fore wing of male with the costa somewhat excised at middle with a fringe of long downturned hair below it on upperside from near base to beyond middle, the median nervure curved upwards and approximated to the subcostal nervure for half the length of cell; hind wing with the costa very highly arched at middle and fringed with hair, the stalk of veins 6, 7 and vein 8 beyond the cell curved downwards.

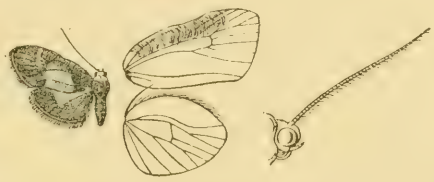

Fig. 173.—*Neoscaptia flavicaput*, ♂. ⅔.

♂. Head and tegulæ except outer edge pale yellow, palpi, edges of frons, and antennæ red-brown, the rest of thorax reddish brown glossed with metallic blue; abdomen dark reddish brown. Fore wing cupreous red, the costa and termen black-brown; a large conical yellow medial patch extending from below costa to inner margin, edged by blue-black and with some metallic blue suffusion beyond it at middle. Hind wing rufous with an oblique conical yellow patch extending on costa from near base to beyond middle and to submedian fold. Underside of fore wing rufous except the yellow patch; hind wing with the costal edge narrowly rufous.

Hab. Br. N. Guinea, Kumusi R. (*Meek*), 1 ♂. *Exp.* 18 millim. Type † ♂ in Coll. Rothschild.

*592 *b*. Neoscaptia androconiata.

Neoscaptia androconiata, Roths. Nov. Zool. xix. p. 239 (1912).

Fore wing of male with fringe of long downturned blackish hair covering fringes of downturned ochreous hair on costa on upperside from near base to beyond middle, the middle of inner margin with a conical excision, the inner margin beyond it clothed with downturned hair above, vein 2 from close to angle of cell, 3, 4 stalked; hind wing with the costa highly arched towards base, then truncate, a rounded patch of androconia below the costa

towards base on upperside, the cell narrow and the neuration rather distorted.

♂. Head, thorax, and abdomen black-brown glossed with metallic blue; tarsi whitish; anal tuft whitish at sides. Fore wing black-brown glossed with metallic blue; the fringes of hair under the costal fringe ochreous; an elliptical white spot in and below end of cell; the terminal half of wing occupied by a deep cupreous red patch leaving the margins black-brown. Hind wing

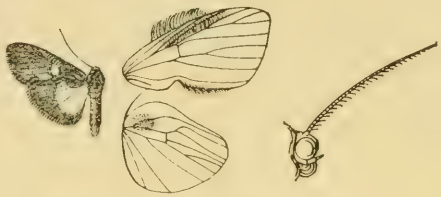

Fig. 174.—*Neoscaptia androconiata*, ♂. ½.

white with some reddish brown at base and on inner margin; the terminal area dark reddish brown, broad at costa, narrowing to tornus; the underside with black-brown patch on basal costal area.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

*592 *c*. Neoscaptia albata.

Neoscaptia albata, Roths. Nov. Zool. xii. p. 470 (1905).

Antennæ of male minutely serrate and ciliated; fore wing with fringe of long scales from basal half of costa on upperside covering an elongate foveal depression, the underside with fringe of long hair on vein 1; hind wing with the costal area strongly lobed to

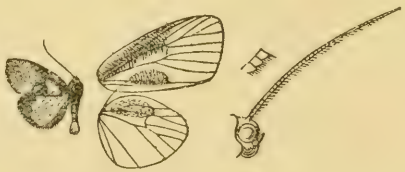

Fig. 175.—*Neoscaptia albata*, ♂. ½.

near apex with large elliptical patch of androconia on upperside below costa.

♂. Head, thorax, and abdomen blue-black; pectus and legs with whitish mixed; anal tuft whitish mixed with brown. Fore wing with the base blue-black, followed by a broad white band, its outer

edge angled outwards in cell; a medial dark brown band with blue-black patch on its inner edge below the cell; the terminal area cupreous red with brown apical patch and small round white subapical spot; cilia dark brown. Hind wing pure white; the inner margin fuscous black; a terminal fuscous black band, very broad at apex, narrowing to tornus and with rather sinuous inner edge. Underside of fore wing with the base white, the costa brown; hind wing with the fuscous extending below costa to near base.

Hab. Br. New Guinea, Angabunga R. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

*592 *d*. **Neoscaptia æqualis.** (Plate XXXI. fig. 20.)

Neoscaptia æqualis, Roths. Nov. Zool. xii. p. 471 (1905).

♂. Head, thorax, and abdomen fuscous, the vertex of thorax with metallic blue patch legs with some whitish; anal tuft with whitish mixed. Fore wing fuscous brown; the area below the cell metallic blue from near base to beyond middle; a subbasal white mark in cell; a curved cupreous red band suffused with fuscous and blue at middle from below costa beyond middle to tornus; an elliptical white subapical spot with some metallic blue suffusion round it. Hind wing white, the inner margin and terminal area fuscous, the latter very broad at apex, its inner edge oblique to submedian fold where it is angled.

Hab. Br. New Guinea, Angabunga R. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

*592 *e*. **Neoscaptia leucodera.**

Neoscaptia leucodera, Roths. Nov. Zool. xii. p. 471 (1905).

Fore wing of male with fringe of scales on costa but without fovea; hind wing without patch of androconia.

♂. Head and thorax black suffused with metallic blue; tegulæ with white patches; pectus with lateral white patches in front; abdomen fuscous. Fore wing black-brown suffused with metallic

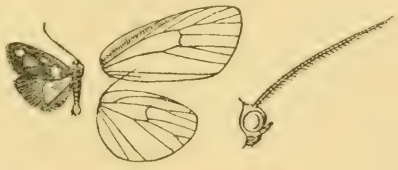

Fig. 176.—*Neoscaptia leucodera*, ♂. ½.

blue except the costal area to beyond middle; a white antemedial band from below costa to inner margin, rounded above and rather constricted at vein 1; a whitish mark at upper angle of cell; a triangular deep red patch beyond the cell; a round subapical white

spot. Hind wing fuscous with oblique triangular white patch from costa near base to submedian fold above tornus; the underside with white streak on base of costa, the patch not extending above the cell, its outer edge angled beyond lower angle of cell.

Hab. Br. New Guinea, Angabunga R. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

*592*f*. **Neoscaptia bimaculata.** (Plate XXXI. fig. 21.)

Neoscaptia bimaculata, Roths. Nov. Zool. xix. p. 239 (1912).

♀. Head and thorax black-brown suffused with metallic blue; the coxæ, streaks on tibiæ, and rings on tarsi white; abdomen black-brown, the anal tuft white. Fore wing black suffused with metallic blue; a conical white antemedial patch from just below costa to inner margin, narrowing above and with its outer edge excurved at middle; a rounded white spot below the costa beyond middle, its inner edge somewhat excised; a deep cupreous red subterminal patch from below costa to just below vein 3, followed by a small elliptical white spot below apex. Hind wing black-brown with oblique conical white patch extending on costa from base to beyond middle and to vein 1 near termen, some white irroration below it at middle. Underside of fore wing black-brown, the red not extending below vein 6.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 22 millim.

*592*g*. **Neoscaptia apicipuncta.** (Plate XXXI. fig. 22.)

Neoscaptia apicipuncta, Roths. Nov. Zool. xix. p. 239 (1912).

♀. Head and thorax black suffused with metallic blue; tarsi with the 1st joint white; abdomen fuscous black, the anal tuft greyish, white below. Fore wing black suffused with metallic blue; an oblique white antemedial band with sinuous edges, narrow at costa and broad at inner margin; a curved deep cupreous red patch from below costa beyond middle to above tornus with a round white spot beyond it below apex. Hind wing black-brown with an oblique conical white patch extending on costa from near base to beyond middle and to vein 1 towards termen. Underside of fore wing black-brown with the red reduced to a rounded patch below costa.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 20 millim.

*592*h*. **Neoscaptia unipunctata.** (Plate XXXI. fig. 23.)

Caprimima unipunctata, Roths. Nov. Zool. xix. p. 242 (1912).

♀. Head and thorax black suffused with metallic blue, the tegulæ pure white; hind femora towards extremities and tibiæ except towards extremities and the 1st joint of mid and hind tarsi

white; abdomen black-brown, the anal tuft white below. Fore wing with the base black suffused with metallic blue; a broad white antemedial band narrowing towards costa, its outer edge oblique and sinuous; the rest of wing deep red edged with black-brown, a small round white subapical spot on the outer edge of the red area. Hind wing black-brown with a large oblique white patch extending on costa from base to beyond middle and along vein 1 almost to termen, some white irroration below vein 1.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 22 millim.

*592 *i*. **Neoscaptia cœruleomarginata.** (Plate XXXI. fig. 24.)

Caprimima cœruleomarginata, Roths. Nov. Zool. xix. p. 241 (1912).

♀. Head and thorax black-brown glossed with blue; pectus, legs, and abdomen black-brown, the anal tuft with some white below. Fore wing with the basal half black-brown glossed with metallic blue; a white antemedial band from below costa to inner margin, narrowing above, its outer edge curved and sinuous; the terminal half deep cupreous red with narrow black margins glossed with metallic blue. Hind wing black-brown with conical white patch from costa before middle to above inner margin; the underside with the white extending on inner area to near base, a deep red patch below costa towards apex.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 24 millim.

*592 *j*. **Neoscaptia pœcila.** (Plate XXXI. fig. 25.)

Neoscaptia pœcila, Roths. Nov. Zool. xii. p. 472 (1905).

♀. Head and thorax black slightly suffused with metallic blue; tegulæ with white patches; abdomen fuscous, the anal tuft whitish below. Fore wing fuscous black; a triangular white antemedial patch in and below the cell; a small whitish discoidal spot; some metallic blue suffusion on medial area before the large deep red postmedial patch extending from below costa to inner margin and slightly edged with metallic blue on outer side. Hind wing fuscous with white patch on basal half from costa to vein 1; the underside with the white patch not extending to base, its outer edge angled inwards below costa.

Hab. Br. N. Guinea, Angabunga R. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 20 millim.

*592 *k*. **Neoscaptia fascionitens.**

Neoscaptia fascionitens, Roths. Nov. Zool. xix. p. 238 (1912).

Fore wing with veins 3, 4 stalked; hind wing with veins 3, 4 stalked to near termen on left side, coincident on right side.

♂. Head, thorax, and abdomen black glossed with metallic blue,

the anal tuft white below. Fore wing black; the basal area glossed with metallic blue; a broad pure white antemedial band with sinuous edges, narrowing considerably to costa; a band of silvery blue suffusion near the inner edge of the black terminal half; an elliptical deep chocolate-red subterminal patch from below costa to above inner margin, followed by a silvery blue band with dentate outer edge. Hind wing black-brown with oblique conical white

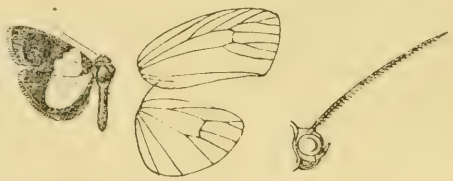

Fig. 177.—*Neoscaptia fascionitens*, ♂. ⅔.

patch extending on costa from base to beyond middle and to above tornus. Underside of fore wing fuscous black, the red reduced to a fascia below costa towards apex.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

*592 *l*. **Neoscaptia affinis.** (Plate XXXI. fig. 26.)

Neoscaptia affinis, Roths. Nov. Zool. xix. p. 239 (1912).

♀. Head and thorax black suffused with metallic blue, the tegulæ pure white; abdomen black-brown, the anal tuft white below. Fore wing black; the basal area glossed with metallic blue; a broad white antemedial band with sinuous edges narrowing considerably to costa; a broad rounded deep chocolate-red subterminal patch from below costa to just above inner margin, defined on inner side by silvery blue suffusion and on outer narrowly by silvery blue with dentate outer edge. Hind wing black-brown with oblique conical white patch extending on costa from base to beyond middle and to above tornus. Underside of fore wing fuscous black with the red reduced to a fascia below apical part of costa.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 18 millim. This is possibly the female of *N. fascionitens*.

*592 *m*. **Neoscaptia albicollis.** (Plate XXXI. fig. 27.)

Neoscaptia albicollis, Roths. Nov. Zool. xix. p. 240 (1912).

Head and thorax black-brown glossed with metallic blue, the tegulæ pure white; abdomen black-brown, the anal tuft whitish. Fore wing black suffused with metallic blue; a broad white ante-

medial band narrowing considerably to costa, then its inner edge incurved and its outer edge excurved; a deep cupreous red patch occupying almost the whole of the terminal half of wing leaving the margins narrowly black-brown, its inner edge somewhat angled inwards to lower angle of cell. Hind wing white with a terminal black-brown band expanding on apical area to middle of costa. Underside of fore wing black-brown, the white antemedial band not quite reaching the costa.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♂, ♀ in Coll Rothschild. *Exp.* 22 millim.

*592 *n.* **Neoscaptia basinitens.** (Plate XXXI. fig. 28.)

Neoscaptia basinitens, Roths. Nov. Zool. xix. p. 240 (1912).

♀. Head and thorax black-brown suffused with metallic blue, the tegulæ pure white; legs brown streaked with whitish; abdomen black-brown, the anal tuft white. Fore wing with the basal half black-brown suffused with metallic blue, the terminal half deep cupreous red with narrow black-brown edges. Hind wing white, the terminal area black-brown, expanding at costa almost to middle and its inner edge angled at submedian fold. Underside of fore wing dark reddish brown, the basal half of inner area white.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 22 millim.

593 *a.* **Scaptesyle fovealis.**

Scaptesyle fovealis, Hmpsn. A. M. N. H. (7) xi. p. 345 (1903).

Fore wing of male with large fovea below the cell containing flocculent tufts of scales; the cell long, narrow, curved, the veins distorted and vein 2 becoming coincident with 3, 6 from below angle of cell; hind wing with the costa highly lobed with a large glandular swelling below its middle, the veins distorted, and veins 3, 4 and 6, 7 coincident.

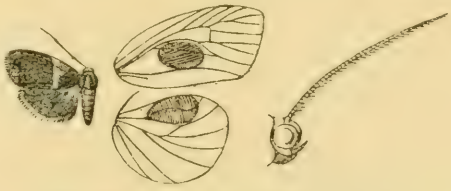

Fig. 178.—*Scaptesyle fovealis*, ♂ $\frac{3}{4}$.

♂. Head and tegulæ golden yellow; thorax and abdomen red-brown tinged with purple. Fore wing red-brown tinged with purple and suffused with blue-green at edges of yellow areas; an antemedial golden yellow band expanding towards costa; a terminal yellow band, wide at costa, narrowing to a point at tornus, the edge

of brown area being angled outwards at vein 6. Hind wing with the basal area pale yellowish, the terminal half pale purplish brown with some yellow on apical half of termen and cilia.

Hab. Br. N. Guinea, Port Moresby (*Kowald*), 1 ♂ type. *Exp.* 16 millim.

*594 *a*. Scaptesyle bifasciata.

Scaptesyle bifasciata, Snell. Tijd. v. Ent. xlvii. p. 150, pl. 11. f. 7 (1904).

Antennæ of male bipectinate to apex.

Head and tegulæ orange; antennæ black with a yellow point at base; thorax and abdomen greenish black, the anal tuft yellow; legs and ventral surface of abdomen grey-brown. Fore wing greenish black; a broad antemedial orange band expanding at middle; a broad oblique postmedial orange band narrowing to costa

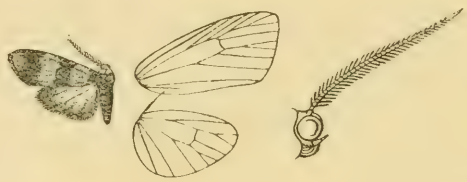

Fig. 179.—*Scaptesyle bifasciata*, ♂. $\frac{3}{2}$.

and inner margin; an apical orange patch. Hind wing orange-yellow, paler towards base; the inner margin black; a terminal black band expanding on apical area.

Hab. Java, Samarang. *Exp.* 14–16 millim. This species is unknown to me.

*594 *b*. Scaptesyle plumosa. (Plate XXXI. fig. 29.)

Scaptesyle plumosus, Roths. Nov. Zool. xix. p. 240 (1912).

♂. Head, thorax, and abdomen black-brown, the tegulæ and base of patagia golden yellow; palpi white in front and at tips; legs streaked with white; anal tuft white with some blackish above, the ventral surface with white bands. Fore wing golden yellow; the base and costal edge black; the terminal area cupreous red edged with black-brown, its inner edge sinuous, angled outwards at discal fold and inwards at vein 1. Hind wing golden yellow; a narrow apical black patch ending in a point at vein 3. Underside of fore wing with the terminal area black-brown with a curved red subapical patch from below costa to vein 4.

♀. Hind wing with the apical patch broader, the termen narrowly black to near tornus.

Hab. N. Borneo, Kina Balu (*Waterstradt*), type † ♂, ♀ in Coll. Rothschild. *Exp.* 28 millim.

In the males of this species and also *S. tricolor* and *S. ixias*, the underside of fore wing except the apical and inner areas and the hind wing to submedian fold except the apex and the area beyond the discocellulars are clothed with rough upturned hair.

594 *c*. Scaptesyle thestias.

Scaptesyle thestias, Snell. Tijd. v. Ent. xlvii. p. 149, pl. 11. f. 6 (1904).

Head, thorax, and abdomen black; tegulæ and base of patagia yellow; legs with yellow bands. Fore wing with the basal half yellow, the base and costa black; the terminal half black suffused with orange-red except at edges, its inner edge angled inwards on subcostal nervure and outwards at veins 6 and 4, then oblique. Hind wing yellow with some black on inner margin and a broad terminal black band, its inner edge slightly angled outwards at vein 6 and strongly at vein 4.

Hab. Java, Preanger, 1 ♂, Mt. Gedeh. *Exp.* 22–24 millim.

*598 *a*. Scaptesyle bipartita. (Plate XXXI. fig. 30.)

Chrysallactis bipartita, Roths. Nov. Zool. xx. p. 194 (1913).

♂. Head and tegulæ golden yellow; antennæ and thorax bright red-brown; palpi red-brown, yellow at tips; pectus and legs pale red-brown, the tarsi ringed with whitish; abdomen whitish suffused with red-brown. Fore wing golden yellow; the base red-brown defined by a dark slightly sinuous line; the terminal area rufous defined on inner side by a slightly incurved black line glossed with silvery grey and very slightly angled inwards at veins 7 and 5, with deeper rufous subterminal spots on it below apex and at middle and a series of points on the veins before termen. Hind wing whitish tinged with rufous; the underside whiter except the costal area.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

*600 *a*. Scaptesyle bizone. (Plate XXXI. fig. 31.)

Padenodes bizone, Roths. Nov. Zool. xix. p. 234 (1912).

♀. Head and tegulæ pure white; thorax golden brown with some white on prothorax and extremities of patagia and metathorax; antennæ and palpi golden brown; legs suffused with golden brown; abdomen brown, the anal tuft and ventral surface white. Fore wing pure white; a rather oblique golden cupreous medial band, its outer edge expanding widely at inner margin; an oblique golden cupreous band from costa before apex to termen above tornus, its outer edge curved. Hind wing white with a narrow pale brown terminal band.

Hab. Br. N. Guinea, Collingwood Bay, Haidana (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 18 millim.

*600 *b*. Scaptesyle violinitens. (Plate XXXI. fig. 32.)

Padenodes violinitens, Roths. Nov. Zool. xix. p. 234 (1912).

♂. Head and tegulæ pure white; thorax golden brown with some white on prothorax and extremities of patagia and metathorax; antennæ, frons, palpi, pectus, legs, and abdomen golden brown. Fore wing pure white; an oblique golden cupreous medial band with a purple tinge, narrowing at middle and expanding to costa and inner margin, conjoined at costa to the similarly coloured subterminal band, its inner edge oblique, its outer edge curved and leaving the termen narrowly white from apex to vein 2; cilia black-brown. Hind wing white with dark brown terminal band narrowing to tornus. Underside of fore wing with the costal and terminal areas dark brown, the medial band not reaching inner margin.

Hab. Br. N. Guinea, Kumusi R. (*Meek*), type † ♂ in Coll. Rothschild. *Exp* 16 millim.

Page 286. Genus **CAPRIMIMA**, insert :—

	Type.
Damias, Boisd. Voy. Astrolabe, Lép. p. 259 (1832), non descr. ...	*elegans*.

602 *a*. Caprimima bougainvillei.

Caprimima cærulescens, bougainvillei, Roths. Nov. Zool. xii. p. 79 (1905).

Antennæ of male bipectinated with short branches. Fore wing with veins 10, 11 well separated.

♂. Head and thorax black shot with green; antennæ at tips,

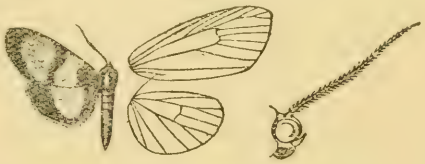

Fig. 180.—*Caprimima bougainvillei*, ♂. ½.

fore tibiæ in front, and extremities of hind femora white; abdomen black. Fore wing black, the basal area shot with green, the terminal area with purple; a bright yellow medial band somewhat constricted in cell; the terminal area with large red patch leaving rather narrow black margins. Hind wing black with triangular yellow patch from middle of costa to above tornus.

Hab. Solomon Is., Bougainville (*Meek*), 1 ♂. *Exp.* 30 millim.

602 *b*. **Caprimima cærulescens**, insert:—

Ab. *mononis*, Jord. Nov. Zool. xi. p. 443 (1904), & xii. pl. 5. f. 9.
Caprimima cærulescens, occidentalis, Roths. Nov. Zool. xix. p. 243 (1912).

Fore wing with the yellow band much broader, its inner edge nearly erect, its outer edge very oblique from costa to discal fold in end of cell.

Hab. Solomon Is., Treasury I. (*Meek*), type † ♀ in Coll. Rothschild, Rendova (*Meek*), 1 ♀, type † ♂ ♀ *occidentalis* in Coll. Rothschild.

*602 *c*. **Caprimima insignis**. (Plate XXXI. fig. 33.)

Caprimima cærulescens, insignis, Roths. Nov. Zool. xix. p. 243 (1912).

♀. Head and thorax black suffused with metallic blue; hind femora white at extremities, the fore tibiæ above and 1st joint of tarsus at sides white; abdomen black-brown, the anal tuft greyish above, white below. Fore wing with the base black suffused with metallic blue; a very broad bright yellow antemedial band, its outer edge oblique and slightly curved; the terminal half of wing black-brown with a broad cupreous red band from just below costa to just above inner margin, its outer edge curved. Hind wing black-brown; a large conical bright yellow patch extending on costa from near base to well beyond middle and almost to termen below vein 1.

Hab. Solomon Is., Vella Lavella (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 34 millim.

602 *d*. **Caprimima isabella**. (Plate XXXI. fig. 34.)

Caprimima cærulescens, isabella, Roths. Nov. Zool. viii. p. 422 (1901).

Head and thorax black shot with blue; antennæ at tips, fore tibiæ, and 1st joint of tarsi and extremity of hind tibiæ white; abdomen black-brown, the anal tuft white below. Fore wing black, the base shot with blue, the terminal area with purple; a very broad bright yellow band extending on costa from well before middle to middle and on inner margin from well before middle to near tornus, its outer edge obliquely curved and slightly indented at lower angle of cell; the terminal area with large red patch leaving rather narrow dark margins. Hind wing black with triangular yellow patch extending from middle of costa to tornus.

Hab. Solomon Is., Isabel I. (*Meek*), 3 ♀. *Exp.* 30–32 millim. Type † ♂ in Coll. Rothschild.

*602 *e*. **Caprimima choiseuli**. (Plate XXXI. fig. 35.)

Caprimima choiseuli, Jord. Nov. Zool. xi. p. 443 (1904).

♀. Head and thorax black shot with metallic green; antennæ

black, white at tips; pectus and femora shot with blue, fore tibiæ and hind femora with some white; abdomen black; the anal tuft white below. Fore wing with the base black shot with metallic green, followed by a bright yellow oblique triangular band, narrow at costa, expanding very broadly on inner margin to well beyond middle and bounded by a strong brilliant blue line; the rest of wing orange-red, the costal edge black, a terminal black band rather broader towards apex and shot with purple. Hind wing black with large bright yellow triangular medial band extending on costa from near base to beyond middle and ending on termen at vein 1; the underside with orange-red apical patch.

Hab. Solomon Is., Choiseul I. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 28 millim.

602. **Caprimima albicollis**, insert :—

Damias elegans, Boisd. Voy. Astrolabe, Lép. p. 259 (1832); Kirby, Cat. Lep. Het. p. 397,

which has priority.

Subsp. 1. *mendax*, Roths. Nov. Zool. viii. p. 419 (1901).

♂. Tegulæ blue-black; antennæ white at tips; hind wing with the white area broader towards inner margin.

Hab. New Guinea, Humboldt Bay (*Doherty*), type † ♂ in Coll. Rothschild.

This is the only species known to have veins 10, 11 of the fore wing from a point or stalked in the male.

*602*f.* **Caprimima germana.**

Caprimima germana, Roths. Nov. Zool. xix. p. 241 (1912).

Fore wing of male on underside with a large patch of rough upturned hair on medial part of costal area.

♂. Head and thorax black-brown glossed with metallic blue; coxæ white, the tibiæ and 1st joint of tarsi with white bands;

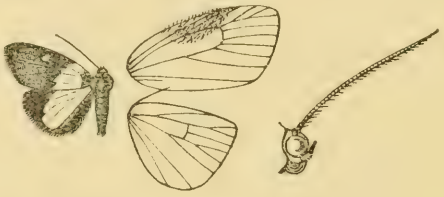

Fig. 181.—*Caprimima germana*, ♂. ½.

abdomen black-brown, the anal tuft with white patch below. Fore wing black-brown, the base suffused with metallic blue; a broad white antemedial band with sinuous edges, its outer edge oblique; a round white spot beyond upper angle of cell; a broad deep red subterminal band from below costa to above inner margin, its inner

edge strongly curved inwards below the white spot, minute white spots just beyond it above and below vein 6. Hind wing black; an oblique white patch extending on costa from base to beyond middle and to vein 1 near termen; some white irroration below vein 1 except towards base; the underside with small red subapical patch.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

602 *g*. **Caprimima bipuncta.** (Plate XXXI. fig. 36.)

Caprimima bipuncta, Roths. Nov. Zool. xix. p. 241 (1912).

Head and thorax black-brown tinged with metallic blue; tibiæ white in front except at base and extremity, the fore and mid tarsi with white band on basal joint; abdomen black-brown, the anal tuft greyish above, white below. Fore wing black-brown, the basal area suffused with metallic blue; a large conical white antemedial patch from subcostal nervure to inner margin; a round white spot beyond upper angle of cell; a deep red subterminal patch from below costa to vein 1, rounded above and below and narrowing above, a white bar-like spot beyond it between veins 7 and 5. Hind wing black with a conical white patch extending on costa from near base to beyond middle and to vein 1.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♀ in Coll. Rothschild; Goodenough I. (*Meek*), 1 ♂, 1 ♀. *Exp.* 26 millim.

*602 *h*. **Caprimima biguttata.** (Plate XXXII. fig. 1.)

Caprimima biguttata, Roths. Nov. Zool. viii. p. 419 (1901).

♂. Head, thorax, and abdomen blue-black; fore legs and the greater part of mid and hind legs white in front; abdomen with white ventral patch towards extremity; wings black. Fore wing with bell-shaped white medial patch from subcostal nervure to inner margin; a rounded white spot beyond upper angle of cell; a deep red subterminal patch from below costa to above vein 1, its inner edge excised at the white spot; a geminate white spot before termen on vein 6. Hind wing with broad white medial band with sinuous edges from costa to just above inner margin.

Hab. New Guinea, Milne Bay (*Meek*), type ♂ in Coll. Rothschild, Kapaur (*Doherty*); Woodlark I. (*Meek*). *Exp.* 30 millim.

Subsp. 1. *reducta*, Roths. Nov. Zool. viii. p. 420 (1901).

♀. Fore wing with the medial white patch reduced and conical; hind wing with the medial band narrower and not reaching vein 1.

Hab. New Hanover (*Webster*), type † ♀ in Coll. Rothschild.

602 *i*. **Caprimima occidentalis.** (Plate XXXII. fig. 2.)

Caprimima occidentalis, Roths. Nov. Zool. viii. p. 420 (1901).

Head, thorax, and abdomen blue-black; antennæ white at tips; fore legs white in front, the proximal joints of mid and hind tarsi and greater part of hind tibiæ white; wings black. Fore wing with medial white band not reaching the costa, its outer edge waved and oblique from below costa to below the cell, then excised; a broad deep red subterminal band from below costa to above inner margin; a geminate white spot on vein 6 before termen. Hind wing white to beyond middle, its outer edge curved outwards from vein 6 to 3.

Hab. Borneo, Busan (*Moit*), 1 ♀; Nias I, type † ♂ in Coll. Rothschild; Eugano (*Doherty*). *Exp.* 25 millim.

602 *j*. **Caprimima monoleuca**, n. sp. (Plate XXXII. fig. 3.)

♀. Head and thorax black suffused with green; patagia with white patches; antennæ whitish towards tips; fore tibiæ above, extremity of mid tibiæ, and the 2nd joint of tarsi white; abdomen black with a faint bluish gloss, the anal tuft white. Fore wing black-brown, suffused with metallic green to beyond the cell, then cupreous red leaving the costa and termen black-brown; an elliptical white spot in end of cell conjoined to a minute white spot above its middle. Hind wing black-brown with a large conical white patch from middle of costa to above tornus, its edges slightly waved. Underside of fore wing without green suffusion, the white patch extending from above the cell to below submedian fold; hind wing with slight red subapical patch.

Hab. Goodenough I. (*Meek*), 1 ♀ type. *Exp.* 28 millim.

*602 *k*. **Caprimima obliqua.** (Plate XXXII. fig. 4.)

Caprimima obliqua, Roths. Nov. Zool. viii. p. 419 (1901).

Head, thorax, and abdomen blue-black; patagia with white patches; fore coxæ and tibiæ in front white; mid and hind coxæ, extremities of femora, tibiæ and 1st tarsal joint white; anal tuft white; wings black. Fore wing with broad white band from near base to middle, its outer edge slightly sinuous, oblique from costa to submedian fold; a broad deep red band from beyond middle to near termen, not quite reaching costa or inner margin. Hind wing with very broad oblique white band occupying more than half the wing from near base of costa to beyond middle to near termen from vein 2 to below 1; the underside with deep red apical patch.

Hab. Br. New Guinea, Aroa R. (*Weiske*), type † ♀ in Coll. Rothschild. *Exp.* 26 millim.

*602 *l*. Caprimima peraffinis. (Plate XXXII. fig. 5.)

Caprimima peraffinis, Roths. Nov. Zool. xix. p. 242 (1912).

♀. Head and thorax black-brown suffused with metallic blue, the patagia white at base; coxæ, femora at extremities, fore tibiæ in front, mid tibiæ at extremities, hind tibiæ and bands on 1st joint of tarsi white; abdomen black-brown, the anal tuft white below. Fore wing with the base black suffused with blue; a broad white antemedial band with oblique sinuous outer edge; the rest of wing cupreous red edged with black-brown. Hind wing white; the inner area black-brown; the apical area black-brown narrowing to a point on termen at vein 2; cilia black-brown; the underside with the apex suffused with cupreous red.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 22 millim.

*602 *m*. Caprimima postexpansa. (Plate XXXII. fig. 6.)

Caprimima postexpansa, Roths. Nov. Zool. xix. p. 242 (1912).

Fore wing rather short and broad.

♀. Head and thorax black suffused with metallic blue, the shoulders with white points, the patagia white at base; coxæ with white spots, the hind femora at extremities, the tibiæ and 1st joint of tarsi with white bands; abdomen black-brown, the anal tuft greyish above, white below. Fore wing with the base black suffused with metallic blue; a broad white antemedial band, its outer edge oblique from costa to median nervure; the rest of wing deep red narrowly edged with black-brown. Hind wing black-brown; an oblique white patch extending on costa from near base to beyond middle and along vein 1 to near termen; some white irroration below extremity of vein 1; the underside with red subapical patch.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 22 millim.

*602 *n*. Caprimima imitatrix. (Plate XXXII. fig. 7.)

Caprimima imitatrix, Roths. Nov. Zool. xix. p. 241 (1912).

♀. Head and thorax black-brown, the shoulders with white patches; coxæ white, the fore and hind tibiæ white except at base and the tarsi with white band on 1st joint; abdomen black-brown, the anal tuft white with some brown. Fore wing with the basal half black-brown glossed with metallic blue; a broad white antemedial band from below costa to inner margin, its outer edge curved; the terminal half cupreous red with narrow black-brown margins. Hind wing black-brown with white patch from costa before middle to vein 1; its outer edge incurved below vein 2; the underside with the patch wider on outer side except at costa, a large red subapical patch.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*) type † ♀ in Coll. Rothschild. *Exp.* 22 millim.

*602 *o*. **Caprimima pseudogelida.** (Plate XXXII. fig. 8.)

Caprimima pseudogelida, Roths. Nov. Zool. xix. p. 243 (1912).

♀. Head and thorax black suffused with metallic blue; the fore coxæ, tibiæ above, and band on 1st joint of tarsus white, the hind femora at extremities, tibiæ on outer side, and a band on 1st joint of tarsus white; abdomen black-brown, the anal tuft whitish above, white below. Fore wing black-brown, the base suffused with metallic blue; a white antemedial band with sinuous edges from below costa to inner margin, narrowing above; a broad subterminal deep cupreous red band from just below costa to just above inner margin, its outer edge curved. Hind wing black-brown with oblique conical white patch from medial part of costa to vein 1, its outer edge waved; the underside with the white patch rather more extensive on outer side; a red subapical patch.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 30 millim.

*602 *p*. **Caprimima cupreonitens.** (Plate XXXII. fig. 9.)

Neoscaptia cupreonitens, Roths. Nov. Zool. xix. p. 240 (1912).

♀. Head and thorax black glossed with metallic blue, the patagia white; the coxæ, streaks on tibiæ and rings on tarsi white; abdomen black, the ventral surface glossed with metallic blue, the anal tuft white at sides and below. Fore wing with the basal area black suffused with brilliant metallic blue; a small antemedial white spot below costa and minute spot in submedian fold; the rest of wing deep cupreous red leaving the margins narrowly black-brown. Hind wing black with an oblique conical white patch extending on costa from close to base to beyond middle and to above tornus. Underside of fore wing with conical white antemedial patch from below costa to inner margin; hind wing with some cupreous red on costal area before apex.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 28 millim.

*602 *q*. **Caprimima ænea.** (Plate XXXII. fig. 10.)

Caprimima ænea, Roths. Nov. Zool. xii. p. 470 (1905); id. Nov. Zool. xiii. pl. 3. f. 11.

♀. Head and thorax black suffused with metallic blue; coxæ and tibiæ with patches of silvery white, the 1st two joints of tarsi banded with white; abdomen black. Fore wing black suffused with metallic blue; a white subbasal band from subcostal nervure to vein 1; a white spot at upper angle of cell; a diffused deep red postmedial patch from below costa to vein 4, obsolescent below and

followed by a bifid white subapical spot. Hind wing black with white patch extending from base to beyond lower angle of cell and from costa to vein 1. Underside of fore wing with the retinaculum white.

Hab. Br. N. Guinea, Angabunga R. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 24 millim.

*602 *r*. Caprimima metallica. (Plate XXXII. fig. 11.)

Caprimima metallica, Roths. Nov. Zool. xii. p. 470 (1905); id. Nov. Zool. xiii. pl. 3. f. 17.

♀. Head, thorax, and abdomen black suffused with metallic blue; patagia with white patches at base; coxæ, tibiæ, and 1st joint of tarsi with silvery white patches in front. Fore wing brilliant metallic blue with a rounded deep red apical patch, the termen narrowly and cilia black. Hind wing black with a large triangular white patch extending from costa near base to vein 1 above tornus. Underside of fore wing with the base, the lower part of cell, and the submedian interspace to beyond origin of vein 1 suffused with bluish white.

Hab. Br. N. Guinea, Angabunga R. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 24 millim.

603. Caprimima calida.

♂. Fore coxæ white; wings with the yellow areas rather more extensive.

Subsp. 2. *flavicollis*, Snell. Tijd. v. Ent. xxii. p. 89, pl. 7. f. 12 (1879).

Hind wing with the black on inner area narrow; the terminal band broader in the female than in the male.

Hab. Celebes, Bua Kraeng (*Frühstorfer*).

Subsp. 3. *tenuis*, Roths. Nov. Zool. viii. p. 420 (1901).

♂. Fore wing with the yellow extending to costa; the red area more extensive leaving narrow black bands beyond the yellow area and on termen. Hind wing with the inner area yellow; the terminal black band much narrower.

Hab. W. Sumatra, Loeboe Rajah (*Ericsson*), type † ♂ in Coll. Rothschild; N. Borneo, Kina Balu.

*603 *a*. Caprimima postvitrea. (Plate XXXII. fig. 12.)

Caprimima postvitrea, Roths. Nov. Zool. xix. p. 243 (1912).

♂. Head and thorax black glossed with blue, the tegulæ and shoulders bright yellow; fore and hind tibiæ except at extremities and the 1st joint of tarsi white; abdomen black-brown, the anal tuft white. Fore wing with the base black glossed with blue; a broad bright yellow antemedial band, its outer edge waved; terminal half of wing black-brown with a large subterminal deep red patch from just below costa to just above inner margin. Hind wing

black-brown; a large semihyaline patch tinged with yellow extending on costa from near base to beyond middle and to below vein 1, its outer edge oblique and slightly waved to vein 2.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

*603 *b*. **Caprimima postnigra.** (Plate XXXII. figs. 13 ♂, 14 ♀.)

Caprimima postnigra, Roths. Nov. Zool. xix. p. 243 (1912).

♂. Head, thorax, and abdomen black-brown; tegulæ bright yellow; the fore and hind tibiæ and the 1st joint of tarsi with white bands; anal tuft white at extremity and below. Fore wing with the base black; a broad bright yellow antemedial band from costa to inner margin, its outer edge sinuous; the terminal half black-brown with a large cupreous red patch from just below costa to just above inner margin. Hind wing black-brown with a yellow antemedial patch from costa to discal fold; some red suffusion just below apex; the underside with the yellow extending from near base to beyond middle and with some yellow irroration below its extremity, the red before termen extending from just below costa to vein 3.

♀. Tegulæ with small yellow spot; fore wing with the yellow deeper in colour, not extending to costa or to so near base; hind wing with yellow patch in, beyond, and below end of cell, almost conjoined to the antemedial patch, no red at apex; the underside with triangular yellow patch extending on costa from near base to beyond middle and to submedian fold, the red confined to a subapical patch.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 22, ♀ 28 millim.

*607 *a*. **Caprimima plagosa.** (Plate XXXII. fig. 15.)

Chionæma plagosus, Roths. Nov. Zool. xx. p. 193 (1913).

♂. Head and thorax fuscous mixed with grey; pectus and legs whitish mixed with brown, the fore tibiæ and the tarsi black ringed with white; abdomen whitish suffused with reddish brown. Fore wing grey thickly irrorated with fuscous brown, the medial area fuscous brown irrorated with grey; a fuscous subbasal bar from costa; antemedial line dark, oblique, waved; a small white discoidal lunule; postmedial line dark, bent outwards below costa, at vein 2 bent inwards, then somewhat outwardly oblique to inner margin; a subterminal rather diffused and maculate line, excurved below costa; a terminal series of rather diffused dark spots. Hind wing grey suffused with brown; the underside whitish irrorated with brown; a dark postmedial band from costa to vein 4, and narrow rather diffused terminal band.

♀. Head and thorax golden brown mixed with grey; fore wing golden brown irrorated with grey, the medial area not darker, the

subbasal line very indistinct, diffused, sinuous and reaching inner margin, the antemedial line very indistinct, diffused, somewhat excurved below costa and not sinuous, a slight dark discoidal spot, the postmedial and subterminal lines very indistinct; hind wing grey suffused with reddish brown and without postmedial band on underside.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 26, ♀ 32 millim.

*607 *b*. **Caprimima pelochroa.** (Plate XXXII. fig. 16.)

Caprimima pelochroa, Turner, ined.

♂. Dull brown; abdomen fuscous brown. Fore wing with a very indistinct dentate black line just before middle, a discoidal point; postmedial and subterminal dentate dark lines, very oblique from costa to vein 6 where they are angled, bent inwards below vein 3. Hind wing fuscous brown.

Hab. Queensland, Kuranda, type † ♂ in Coll. Turner. *Exp.* 20 millim.

*607 *c*. **Caprimima scripta.** (Plate XXXII. fig. 17.)

Caprimima scripta, Lower, P. Linn. Soc. N.S.W. xxvi. p. 640 (1902).

♀. Brownish grey. Fore wing with basal black spots on costa and below the cell; a subbasal spot on costa; a double waved antemedial line from cell to inner margin, towards which it is bent outwards; a black spot in middle of cell and spot on costa above it; a discoidal point and striga from costa above it; a much interrupted irregular postmedial line, bent outwards and double at veins 3, 4, angled inwards at vein 2 and again double at inner margin; a point on costa before apex and others on termen at middle and above tornus.

Hab. Queensland, Duaringa, type † ♀ in Coll. Lower. *Exp.* 20 millim.

607 *d*. **Caprimima sicciodes**, n. sp. (Plate XXXII. fig. 36.)

♂. Head, thorax, and abdomen grey tinged with red-brown. Fore wing grey tinged with red-brown; two diffused subbasal blackish spots below the costa and two below the cell, diffused antemedial blackish spots below the costa and cell; a diffused medial black patch in and below the cell with spot above it below the costa; a postmedial blackish bar from costa; subterminal line rather diffused, double, blackish, irregularly dentate, rather incurved below vein 4. Hind wing whitish tinged with red-brown; a faint brownish discoidal spot, diffused sinuous curved postmedial line from costa to submedian fold, and spot on termen at discal fold, all rather more distinct on underside.

Hab. N.E. Tasmania (*R. M. Green*), 1 ♂ type. *Exp.* 26 millim.

607 *e*. Caprimima aroa.

Scaptesyle aroa, Beth.-Baker, Nov. Zool. xi. p. 422, pl. vi. f. 19 (1904).

♀. Head, thorax, and abdomen white; palpi, antennæ, tegulæ, and patches on shoulders and thorax brown. Fore wing white; a subbasal brown band from costa to submedian fold where it emits a short fascia outwards; a brown antemedial band with waved edges, excurved from below costa to submedian fold and confluent with a similar median band at subcostal and median nervures enclosing a white patch with a small brown spot on it; the excurved part of medial band emitting two oblique fasciæ to the postmedial band, which is excurved at vein 7, then irregularly dentate and connected by streaks with the irregular subterminal band which emits a streak to termen at discal fold; a narrow brown terminal band with slightly waved inner edge. Hind wing yellowish white, some fuscous suffusion on terminal area between veins 7 and 1, broad to vein 2, then narrow.

Hab. Br. N. Guinea, Up. Aroa R. (*Meek*), type † ♀ in Coll. Rothschild, Owgarra (*Meek*), 1 ♀. *Exp.* 34 millim.

609 *a*. Caprimima aurantiomarginata. (Plate XXXII. fig. 18.)

Caprimima aurantiomarginata, Roths. Nov. Zool. xix. p. 244 (1912).

♂. Head orange, the vertex and antennæ except towards base red-brown; thorax red-brown, the pectus and legs yellow; abdomen brown, the base and anal tuft pale yellow. Fore wing bright red-brown, the costa, termen, and cilia deep orange, a silvery bluish gloss below costa and before termen. Hind wing reddish brown, the base with some pale yellowish.

Hab. Solomon Is., Choiseul I. (*Meek*), 1 ♂, Kulambangan I. (*Meek*), 1 ♂, Isabel I. (*Meek*), Bougainville I., Buin (*Meek*), Arawa (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

610 *a*. Utriculifera aplaga, insert (syn.):—

Utriculifera muricolor, Roths. Nov. Zool. xx. p. 226 (1913).

Br. N. Guinea, Milne Bay (*Meek*), type † ♂ in Coll. Rothschild.

*610 *b*. Utriculifera variegata.

Utriculifera variegata, Roths. Nov. Zool. xix. p. 244 (1912).

Antennæ of male with the upper edge of the vesicle and the shaft beyond it serrate; abdomen with lateral tufts of hair from the segments except at base; palpi longer and more strongly fringed

with hair, fore femora fringed with long hair; fore wing with the costa highly lobed and fringed with hair at base, a fold below the cell and some rough hair below lower angle, vein 2 from lower angle of cell and curved downwards at base; hind wing with a fold below the cell and a fringe of upturned hair beyond the cell above vein 5 on upperside, vein 2 stalked with 3.

♂. Head and thorax pale ochreous mixed with some brown, the antennæ with the vesicles blackish; pectus and legs ochreous, the fore and mid tibiæ and tarsi dark brown; abdomen whitish, the lateral tufts of hair and ventral surface ochreous tinged with brown.

Fig. 182.—*Utriculifera variegata*, ♂. ¾.

Fore wing ochreous suffused with reddish brown except on basal area; the fringe of hair on base of costa blackish; antemedial line brown, waved, oblique from costa to submedian fold; a blackish point at lower angle of cell, the hair below end of cell rufous; postmedial line brown defined on outer side by ochreous, minutely waved, oblique to vein 5 and at vein 3 bent inwards to below end of cell; a series of small blackish spots on terminal part of costa and termen. Hind wing ochreous, the terminal half suffused with reddish brown, some dark brown suffusion at upper angle of cell.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

*610 *c*. Utriculifera utricularia.

Utriculifera utricularia, Roths. Nov. Zool. xix. p. 244 (1912).

Antennæ of male serrate beyond the vesicle; palpi very large and thickly fringed with hair; fore femora fringed with long hair; abdomen with lateral tufts of long hair from 3rd segment; fore wing with the costa moderately lobed and fringed with hair at base, fringes of hair on base of median nervure and vein 1; vein 2 from middle of cell and strongly curved at base, 3 from well before angle; hind wing with a fringe of downturned hair in upper part of cell and fringe of upturned hair in lower part, fringes of hair below the cell and on base of vein 1 on upperside, the underside with a fold below the cell; vein 2 shortly stalked with 3.

♂. Head and thorax ochreous suffused with reddish brown, the antennæ with the vesicles blackish; abdomen whitish, the lateral tufts and ventral surface ochreous. Fore wing ochreous tinged with red-brown, the base suffused with darker brown; a curved

subbasal series of dark points; an oblique antemedial blackish bar from costa followed by a curved series of points; a black point at lower angle of cell; a postmedial series of dark points, indistinct except towards costa, oblique to discal fold, then inwardly oblique;

Fig. 183.—*Utriculifera utricularia*, ♂. ⅔.

some brown points on apical part of costa and termen. Hind wing ochreous tinged with red-brown, the fringes of hair below the cell deeper red-brown; the underside with small brown postmedial spot below the costa.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

618 *a*. **Pronola fraterna.** (Plate XXXII. fig. 19.)

Pronola fraterna, Schaus, Pr. U.S. Nat. Mus. xxix. p. 197 (1905).

♂. Head and thorax orange-yellow; abdomen fuscous brown, the base yellow below. Fore wing dark brown, the basal, costal, and apical areas down to vein 3 orange-yellow. Hind wing fuscous brown, the costal area whitish.

Hab. Fr. Guiana, Maroni R. (*Schaus*), 1 ♂, type † ♂ in U.S. Nat. Mus. *Exp.* 18 millim.

619 *a*. **Pronola ectrocta.** (Plate XXXII. fig. 20.)

Pronola ectrocta, Dogn. Mém. Soc. Ent. Belg. xix. p. 126 (1912).

♂. Head and thorax yellow, the latter with some brown irroration on dorsum; palpi black; abdomen yellow dorsally tinged with brown, the anal tuft with black-brown mixed. Fore wing bright yellow with a large brown patch except on costal area extending from before middle where it is angled inwards on vein 1 to towards termen, its upper edge strongly excised at end of cell; the costal edge black towards base. Hind wing pale yellow. Underside of fore wing with the tuft of hair at upper angle of cell black with a silvery gloss.

Hab. Colombia (*Fassl*), 1 ♂. *Exp.* 22 millim. Type † ♂ in Coll. Dognin.

*619 *b*. **Pronola perdiffusa.**

Pronola perdiffusa, Dogn. Mém. Soc. Ent. Belg. xix. p. 125 (1912).

Fore wing of male with a large fovea in end of cell on underside with some rough hair before it, a patch of blackish androconia above it and a tuft of silvery black hair at upper angle of cell, an oblique ridge of hair below base of vein 2.

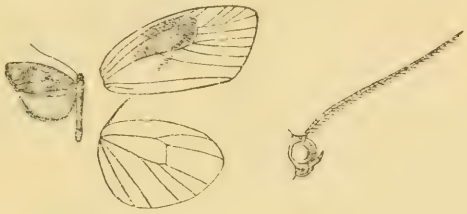

Fig. 184.—*Pronola perdiffusa*, ♂.· ½.

♂. Head, thorax, and abdomen yellow tinged with brown. Fore wing yellow with faint diffused reddish brown ante- and postmedial bands from below costa to inner margin. Hind wing pale yellow.

Hab. Colombia, Cañon del Tolima, type † ♂ in Coll. Dognin. *Exp.* 22 millim.

Genus **EUPROCTOSIA**, nov.

Type, *E. cretata*.

Proboscis minute; palpi porrect, slight, hardly extending as far as the frons, which is smooth; antennæ of male minutely serrate; hind tibiæ with two pairs of spurs. Fore wing rather short and broad; veins 3, 4 stalked; 5 from above angle of cell; 6 and 9 stalked, 7, 8 absent; 10 from cell; 11 anastomosing with 12. Hind wing with veins 3, 4 stalked to near termen; 5 from just below middle of discocellulars; 6, 7 stalked; 8 from middle of cell.

In key differs from *Nudosia* in the hind tibiæ having the medial spurs present; fore wing with veins 3, 4 stalked, 6 and 9 stalked, 7, 8 absent; hind wing with veins 3, 4 and 6, 7 stalked.

621 *a*. **Euproctosia cretata**, n. sp.

♂. Head and thorax ochreous white; abdomen white, the ventral surface ochreous white. Fore wing ochreous white irrorated with pale brown; a brown patch at base of costa; a slight brown antemedial patch on costa with faint diffused oblique line from it to inner margin; a faint medial brown shade from costa to submedian fold; a large fuscous spot at lower angle of cell and smaller spot beyond upper angle; a faint oblique postmedial brown shade; a slight dark mark on termen below apex. Hind wing uniform

chalky white. Underside of fore wing suffused with fuscous except the inner and terminal areas.

♀. Fore wing without the brownish basal and antemedial patches

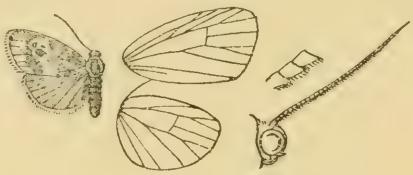

Fig. 185.—*Euproctosia cretata*, ♂. $\frac{3}{2}$.

on costa or dark spot on termen; a single small fuscous discoidal spot; the underside without fuscous suffusion.

Hab. Gold Coast, Bibianaha (*Spurrell*), 1 ♂, 1 ♀ type. *Exp.* ♂ 16, ♀ 20 millim.

Page 296. Under **CHIONÆMA** insert:—

	Type.
Lexis, Wllgrn. Vet.-Akad. Handl. (2) 5 (4), p. 41 (1865)	*rejecta*.

626 *a*. **Chionæma metaleuca**, n. sp. (Plate XXXIII. fig. 1.)

Chionæma alborosea, ab. 2, Hmpsn. Cat. Lep. Phal. B. M. ii. p. 299.

♂. Head, thorax, and abdomen white; palpi brown at tips; tegulæ and patagia tipped with crimson; fore legs red-brown, the tibiæ and tarsi ringed with white. Fore wing pure white; the costal edge crimson towards base; subbasal line crimson, expanding into small spots at costa and below the cell, ending at vein 1; antemedial line crimson, oblique, slightly excurved below costa; three minute triangularly-placed black discoidal spots; postmedial line crimson, oblique, almost straight; a curved rather diffused crimson line just before termen. Hind wing pure white.

♀. Fore wing with single black discoidal spot.

Hab. Java, Sindanglaza (*Cockayne*), 1 ♂ type, Tjisol, 1 ♀. *Exp.* 22 millim.

629 *a*. **Chionæma meyricci.**

Clerckia meyricki, Roths. Nov. Zool. viii. p. 410 (1901).

Fore wing of male with the costal fringe moderate, the lobe small, veins 6, 7, 8 stalked, 9 absent; female with veins 4, 5 stalked.

♂. Head and thorax vermilion-red, palpi, antennæ, tegulæ, and outer edge of patagia black; pectus and legs black; abdomen black with orange-red bands, incomplete dorsally on median segments. Fore wing vermilion-red with black fasciæ on costa and inner

margin, the former expanding slightly and including the fringe of hair, the latter expanding towards tornus; cilia black. Hind wing black with orange patch in, below, and beyond end of cell. Underside of fore wing black with medial and subterminal orange streaks below costa and irregular patch below end of cell.

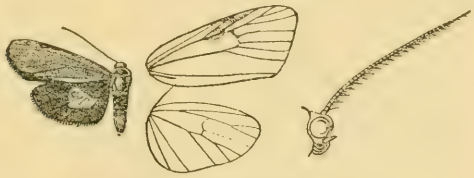

Fig. 186.—*Chionæma meyricci*, ♂. ½.

♀. Patagia with the red reduced to patches; hind wing with the orange patch smaller; underside of fore wing with large orange patch in, below, and beyond end of cell.

Hab. Queensland, Brisbane (*Turner*), 1 ♂. *Exp.* ♂ 34, ♀ 40 millim. Type † in Coll. Rothschild.

629 *b*. **Chionæma dinava**. (Plate XXXIII. fig. 2.)

Chionæma dinawa, Beth.-Baker, Nov. Zool. xi. p. 423 (1904).

♂. Head, thorax, and abdomen blue-black; tegulæ, patagia, a ring round neck, and ventral surface of abdomen except at extremity scarlet. Fore wing scarlet with narrow blue-black margins, expanding slightly above the costal tuft and obliquely from termen at vein 2 to middle of inner margin. Hind wing orange with the inner and terminal areas deep black, the former expanding towards tornus, the latter towards apex. Underside of fore wing orange, the basal half of costa blue-black, the terminal half of wing black.

♀. Hind wing with the inner area not black, the black on termen very narrow below submedian fold.

Hab. Br. N. Guinea, Dinawa, 4000′ (*Pratt*), type † ♂ in Coll. Bethune-Baker; Goodenough I. (*Meek*), 2 ♀. *Exp.* 34 millim.

630. **Chionæma effracta**, insert (syn.):—

Chionæma pusilla, Wileman, Entom. xliii. p. 177 (1910).

Formosa, type † in Coll. Wileman.

*631 *a*. **Chionæma aurantipuncta**.

Chionæma aurantipuncta, Roths. Nov. Zool, xix. p 245 (1912).

Fore wing of male without tuft of long hair or streak of androconia.

♂. Head and thorax white mixed with some orange-yellow; palpi orange; fore and mid legs mostly orange, the hind tarsi orange except basal joint; abdomen white, dorsally suffused with crimson towards extremity leaving the anal tuft white. Fore wing white; an oblique orange subbasal bar from costa; a small round orange antemedial spot below the cell with curved bar beyond it from costa and oblique bar from below it to inner margin; a round

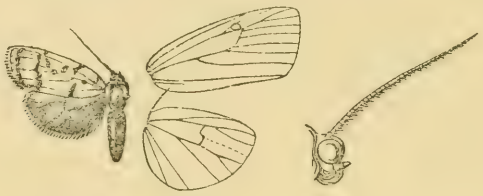

Fig. 187.—*Chionæma aurantipuncta*, ♂. ½.

orange spot in middle of cell, another at lower angle, and oblique bar beyond upper angle; postmedial line orange, slightly bent outwards below costa, then slightly dentate, oblique to vein 4, then erect; a curved somewhat dentate orange line from below costa before apex to termen above tornus. Hind wing white tinged with pale crimson except on costal area; cilia white. Underside white; fore wing with the costa except towards apex and a bar beyond upper angle of cell pale crimson.

Hab. Lombok, Sapit (*Frühstorfer*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

642 *a*. **Chionæma flavicincta**.

Chionæma flavicincta, Hmpsn. A. M. N. H. (7) xi. p. 345 (1903).

Fore wing of male with the costal fringe moderate, a thick fringe of long hair on underside below the cell, the lobes large.

♂. Head and thorax white; palpi black; antennæ red; tegulæ

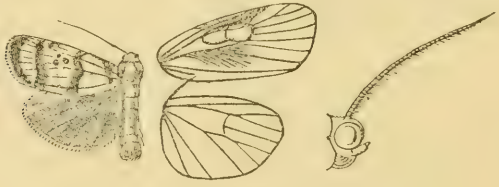

Fig. 188.—*Chionæma flavicincta*, ♂. ½.

and patagia edged with scarlet; metathorax with scarlet patch; tibiæ and tarsi banded with orange; abdomen white slightly tinged with red on dorsum, the anal tuft yellow. Fore wing white; the costal edge yellow, the subbasal band scarlet expanding towards costa and

ending above inner margin; an antemedial scarlet band, excurved from costa to median nervure, then oblique, a black line on its inner edge; a black spot in end of cell and two on discocellulars; a yellow and vermilion bar from costa before the postmedial scarlet band, which is erect from costa to submedian fold, then bent outwards, a black line on its outer edge except towards costa; a yellow terminal band with a slight red tinge above tornus. Hind wing pink, the costal area yellow; the cilia yellow at base, white at tips.

Hab. Assam, Khásis, 1 ♂ type. *Exp.* 34 millim.

*644 *a*. **Chionæma rufifrons.**

Chionæma rufifrons, Roths. Nov. Zool. xix. p. 246 (1912).

Antennæ of male minutely serrate with bristles and cilia.

♂. Head, thorax, and abdomen white; 3rd joint of palpi and frons crimson; antennæ brown except at base; fore femora and all

Fig. 189.—*Chionæma rufifrons.*

the tibiæ and tarsi suffused with crimson. Fore wing silvery white, the costal edge crimson to beyond middle. Hind wing white.

Hab. W. Africa, St. Thomé I. (*Mocquerys*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

645 *a*. **Chionæma selangorica.** (Plate XXXIII. fig. 3.)

Chionæma selangorica, Hmpsn. A. M. N. H. (7) xi. p. 346 (1903).

♂. Head and thorax white; palpi and edges of tegulæ and patagia deep orange; legs banded with orange; abdomen orange, the ventral surface white. Fore wing white, the costal edge orange; a deep orange subbasal band excurved above inner margin; an antemedial band bent inwards to costa and emitting a short fascia in cell; two black discoidal spots; a postmedial band forking at costa, oblique and narrow to vein 4 where it is angled, then stronger and incurved; a broad terminal band. Hind wing and underside of fore wing pale orange tinged with pink.

♀. Fore wing without the fascia in cell and with one discoidal spot defined by orange.

Hab. Nicobars (*Rogers*), 1 ♀; Selangor, Semangho, 2700′ (*H. C. Robinson*), 1 ♂ type. *Exp.* 34 millim.

*645 *b*. **Chionæma subalba.** (Plate XXXIII. fig. 4.)

Chionæma subalba, Wileman, Entom. xliii. p. 176 (1910).

♂. Head and thorax white, the tegulæ with crimson band at tips, the patagia, meso- and metathorax with crimson spots; palpi black; antennæ brownish; fore and mid legs with the tibiæ banded with black-brown and the tarsi black-brown; abdomen white, dorsally tinged with crimson towards extremity. Fore wing white; a crimson subbasal band from costa to vein 1, connected by a streak on costa with the somewhat oblique antemedial band which is slightly excurved below costa and above inner margin; a black spot in end of cell and discoidal bar; a crimson postmedial band, oblique from costa to below vein 3, then erect, a slight black spot on its outer edge below costa; a curved crimson band from costa near apex to tornus. Hind wing white, faintly tinged with crimson except on costal area; cilia white. Underside of fore wing with crimson fascia on costa from base to the lobe; hind wing with slight brown discoidal lunule.

Hab. Formosa, Rantaizan (*Wileman*), type † ♂ in Coll. Wileman. *Exp.* 44 millim.

646 *a*. **Chionæma euryxantha**, n. sp. (Plate XXXIII. fig. 5.)

♂. Head and thorax white; palpi and antennæ orange; tegulæ orange with whitish patches at tips; patagia orange at tips; mesothorax with broad orange band, the metathorax with orange patch behind; legs yellow; abdomen white with some yellow at sides and extremity. Fore wing white; a broad oblique orange subbasal band, its outer edge with small black spots below costa and cell and indented in cell; a broad orange antemedial band, its inner edge sinuous defined by a maculate black line and meeting the subbasal band at inner margin, its outer edge angled outwards in cell then sinuous; two obliquely placed black discoidal points; a broad orange postmedial band, its inner edge excurved below costa then incurved, its outer edge with small black spot at costa and sinuous black line below discal fold; an orange terminal band, its inner edge angled inwards to the costal tuft below costa. Hind wing yellow.

Hab. Philippines, Manila (*Ledyard*), 1 ♂ type. *Exp.* 36 millim.

647. **Chionæma javanica.**

Larva. Piepers, Tijd. v. Ent. xlvii. p. 151. pl. x. f. 6.

648 *a*. **Chionæma axiologa.** (Plate XXXIII. fig. 6.)

Chionæma axiologa, Swinh. A. M. N. H. (7) xvi. p. 143 (1905).

♂. Head and thorax white; palpi scarlet with the 3rd joint

black; neck with scarlet ring; tegulæ and patagia tipped with scarlet; meso- and metathorax with scarlet bands; pectus scarlet in front; tibiæ and tarsi fuscous in front; abdomen pale crimson, the base and ventral surface white, the anal tuft ochreous. Fore wing white; a subbasal scarlet bar from costa; an antemedial slightly curved scarlet band defined by a black line on inner side; an elliptical black discoidal spot; postmedial scarlet band defined by a black line on outer side oblique from costa to vein 3, then erect, a scarlet mark on costa beyond it connected with the terminal scarlet band with dentate inner edge, ending just above tornus. Hind wing crimson, the costal area and cilia whitish.

Hab. Nias I., 1 ♂ type. *Exp.* 44 millim.

*648 *b*. **Chionæma fasciatella.** (Plate XXXIII. fig. 7.)

Chionæma fasciatella, Roths. Nov. Zool. xix. p. 245 (1912).

♂. Head and thorax white; palpi, lower part of frons, and antennæ except at base orange; tegulæ and terminal half of patagia orange, the mesothorax with orange band; fore coxæ orange, the tibiæ and tarsi banded with orange; abdomen white, the terminal half of dorsum and anal tuft below orange. Fore wing white; a sinuous orange subbasal band not reaching inner margin and defined on outer side by black; an orange antemedial band defined on inner side by black and slightly curved inwards to costa, emitting a spur on outer side in cell to near the two, sometimes conjoined, black discoidal spots; an obliquely curved postmedial orange band defined on outer side by black; some orange at the extremity of the costal fringe; a terminal orange band not quite reaching tornus and with somewhat dentate inner edge. Hind wing yellow tinged with pink, the costal area white to beyond middle. Underside of fore wing suffused with orange except on inner area, the costa tinged with scarlet towards base.

♀. Fore wing with one black discoidal spot, the postmedial band slightly bent outwards to costa; underside of both wings orange tinged with scarlet.

Hab. Celebes, Palos B., Dongala (*Doherty*), type † ♂ in Coll. Rothschild, Tondano, Bonthain. *Exp.* ♂ 38, ♀ 40–46 millim.

649 *a*. **Chionæma saulia.** (Plate XXXIII. fig. 8.)

Chionæma saulia, Swinh. A. M. N. H. (7) viii. p. 124 (1901).

♀. White; palpi scarlet, black at tips; antennæ brownish; tegulæ with curved scarlet bands; patagia tipped with scarlet; fore coxæ scarlet in front, the tibiæ and tarsi black above with two white spots on former; abdomen dorsally scarlet towards extremity. Fore wing with scarlet subbasal line from costa to submedian fold, angled outwards below costa; slightly curved ante- and postmedial scarlet lines; a black discoidal spot; some scarlet subterminal marks almost obsolete except below apex.

Hab. Borneo, Paitan (*Everett*), 1 ♀ type. *Exp.* 44 millim.

650 *a*. **Chionæma malayensis**, n. sp. (Plate XXXIII. fig. 9.)

♂. Head and thorax white; palpi, antennæ, edges of tegulæ and patagia, and bands on meso- and metathorax scarlet; pectus with scarlet patches; fore femora above orange, the tibiæ and all the tarsi orange ringed with white, the mid tibiæ orange at base and with broad black band at middle, the hind tibiæ with some orange above at middle; abdomen yellowish dorsally tinged with scarlet towards extremity; the ventral surface white. Fore wing white; the costa scarlet towards base; a sinuous scarlet subbasal band, excurved above inner margin; antemedial line black, obliquely excurved towards costa and slightly angled inwards at vein 1, defined on outer side by a scarlet band emitting a short fascia in the cell; a black discoidal bar, angled inwards at median nervure; a postmedial scarlet patch enclosing a white mark on the costa, then a black line defined on inner side by a scarlet band, the line bent outwards below the scarlet patch, then obliquely excurved to vein 3 and erect to inner margin; a scarlet band before termen with somewhat dentate inner edge. Hind wing buff-yellow.

Hab. Selangor, Buket Kutu (*Holman-Hunt*), 2 ♂ type. *Exp.* 40 millim.

650 *b*. **Chionæma rhadota.** (Plate XXXIII. fig. 10.)

Chionæma rhadota, Swinh. A. M. N. H. (7) xx. p. 76 (1907).

♀. Head and thorax white; palpi and antennæ crimson; patagia edged with scarlet above and at tips; terminal half of tibiæ and the tarsi crimson ringed with white; abdomen white suffused with crimson towards extremity. Fore wing white, the costal edge scarlet at base; a subbasal scarlet band from costa to vein 1; a broad antemedial scarlet band with black line on its inner edge, excurved from costa to below the cell, then erect, a minute black streak beyond it in cell; a lunulate black discoidal spot; a broad scarlet postmedial band with black line on its outer edge, incurved from costa to vein 3, then erect; a scarlet terminal band; cilia yellow. Hind wing yellow, the termen tinged with crimson.

Hab. Nias I., Sitoli (*Schreiber*), 2 ♀ type. *Exp.* 36 millim.

651 *a*. **Chionæma affinis.**

Chionæma affinis, Snell. Tijd. v. Ent. xlvii. p. 152, pl. xi. f. 1 (1904).

Head, thorax, and abdomen white; palpi black, slightly reddish at tips; antennæ brown; the tips of tegulæ and a band on patagia scarlet; legs with black points. Fore wing white; a scarlet subbasal striga from costa which is black beyond it to the black antemedial line, which is angled outwards below costa, then bent inwards and excurved to inner margin; a small black discoidal spot; postmedial line black, oblique and slightly irregular from

costa to vein 4, then erect and minutely waved. Hind wing white.

Hab. Java, Preanger, 1 ♂. *Exp.* ♂ 36, ♀ 42–44 millim.

651 *b*. Chionæma amelæna.

Chionæma amelæna, Hmpsn. A. M. N. H. (7) xi. p. 346 (1903).

Fore wing of male with the outer lobe large, the inner small and closely applied.

♂. Head and thorax white; palpi and antennæ vermilion; tegulæ and patagia edged with vermilion; metathorax with vermilion patch; tibiæ and tarsi banded with orange; abdomen dorsally yellow tinged with red, ventrally white. Fore wing white; the costal edge vermilion to antemedial line; the subbasal line excurved below costa, incurved at submedian fold, then bent outwards

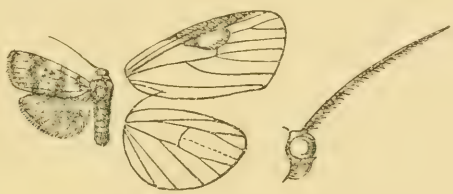

Fig. 190.—*Chionæma amelæna*, ♂. ½.

and finer; a rather broad antemedial band slightly incurved below the cell; a triangular spot in end of cell; two small red discoidal spots with some black on them; postmedial line forking towards costa, angled outwards at vein 4, then incurved, the costal edge vermilion; a dentate terminal band. Hind wing pale yellow, the termen suffused with red except at tornus.

Hab. Singapore (*Ridley*), 1 ♂ type. *Exp.* 26 millim.

*651 *c*. Chionæma rufistigma. (Plate XXXIII. fig. 11.)

Chionæma rufistigma, Roths. Nov. Zool. xix. p. 245 (1912).

♀. Head and thorax white; palpi and lower part of frons crimson; tegulæ at tips and patagia except at base crimson, the metathorax crimson behind; fore and mid tibiæ and the tarsi banded with orange; abdomen white dorsally tinged with yellow. Fore wing white; the costa scarlet towards base; a subbasal scarlet line, incurved below the cell; antemedial line scarlet, almost straight, a slight scarlet mark beyond it in cell before the small scarlet discoidal spot with brown centre; postmedial line scarlet, excurved to submedian fold where it is slightly angled inwards; a terminal scarlet band with dentate inner edge. Hind wing pale yellow with a slight scarlet tinge towards termen; cilia

white. Underside pale scarlet except the inner area of fore wing and base of inner area of hind wing.

Hab. N. Borneo, Mt. Marapok, type † ♀ in Coll. Rothschild. *Exp.* 30 millim.

This is possibly the female of *C. amelæna*.

655 *a*. **Chionæma yunnanensis.** (Plate XXXIII. fig. 12.)

Chionæma yunnanensis, Hmpsn. A. M. N. H. (7) xi. p. 346 (1903).

♀. White; palpi fuscous; tegulæ edged with orange; tibiæ and tarsi banded with fuscous. Fore wing with the costal edge orange to antemedial line; a subbasal orange line from costa to submedian fold; an antemedial line slightly incurved to costa, then oblique; a black spot at middle of cell with a point beyond it on median nervure and a discoidal spot; the postmedial orange line oblique from costa to vein 2, then erect, slightly incurved at discal fold. Underside of fore wing suffused with fuscous.

Hab. Yunnan, Teng Yenk (*H. E. Hobson*), 1 ♀ type. *Exp.* 30 millim.

660. **Chionæma miles,** insert:—

Clerckia miles, cybdela, Roths. Nov. Zool. xii. p. 79, pl. v. f. 12 (1905).

Hind wing with the orange band in male reduced to a slight costal streak or extending to vein 1 in a more or less reduced form, of female sometimes much reduced.

Hab. Solomon Is., Bougainville I. (*Meek*), 1 ♂, 1 ♀.

*660 *a*. **Chionæma thoracica.**

Clerckia thoracica, Roths. Nov. Zool. viii. p. 410 (1901), & x. pl. 11. f. 6.

♂. Head and tegulæ blue-black; neck with orange ring; thorax deep orange; abdomen black with the anal tuft and ventral surface orange. Fore wing orange suffused with scarlet towards the moderately broad terminal black band, which is angled inwards above and below vein 6 and is then slightly waved; a black fascia on costa, narrow on basal half, then slightly widening. Hind wing orange; a black fascia below vein 1 narrowing to a point near base; a terminal black band, broad at costa, narrowing to the fascia on inner area.

The lobe of fore wing minute.

Hab. N. Guinea, Humboldt Bay (*Doherty*), type † ♂ in Coll. Rothschild. *Exp.* 36 millim.

*661 *a*. **Chionæma guizonis.** (Plate XXXIII. fig. 13.)

Clerckia securizonis, guizonis, Jord. Nov. Zool. xi. p. 442 (1904).

♀. Head, thorax, and abdomen black shot with brilliant blue;

front of pectus crimson; anal tuft crimson. Fore wing with the costal area to beyond middle crimson, the inner area orange; the costal edge black; a rather broad black fascia on basal half of inner margin; a very broad black terminal band shot with blue, its inner edge retracted below vein 7 to cell, then nearly erect to inner margin beyond middle. Hind wing orange-yellow with black terminal band, narrowing to a point at tornus and its inner edge sinuous; the underside with the costa suffused with crimson and with a little black at base.

Hab. Solomon Is., Guizo I. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 40 millim.

*662 *a*. **Chionæma postdivisa.** (Plate XXXIII. fig. 14.)

Chionæma postdivisa, Roths. Nov. Zool. xx. p. 192 (1913).

♀. Head black glossed with metallic blue; tegulæ and patagia orange-yellow; thorax and abdomen black-brown; pectus orange-yellow in front; fore legs glossed with blue; ventral surface of abdomen orange-yellow. Fore wing orange-yellow; the costa black, glossed with blue towards base; a narrow terminal black band running inwards on inner area to below end of cell and extending to submedian fold. Hind wing orange-yellow; a terminal black band, broad at costa, narrowing to submedian fold and to a point at tornus. Underside of fore wing with the terminal third black-brown with curved slightly sinuous inner edge.

Hab. Br. N. Guinea, Lr. Mambare R. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 38 millim.

663. **Chionæma fulvia**, insert:—

Clerckia fulvia, trigona, Roths. Nov. Zool. x. p. 312 (1903).

Fore wing with the black on costa narrower, the scarlet extending to termen leaving the cilia and a wedge-shaped patch at tornus black. Hind wing with the inner area black.

Hab. Br. N. Guinea, Aroa R. (*Welske*).

663 *a*. **Chionæma metamelas**, n. sp. (Plate XXXIII. fig. 15.)

♂. Head black, the frons glossed with blue; thorax scarlet with some black on prothorax; pectus and legs black, the pectus scarlet in front; abdomen black-brown slightly glossed with blue, the ventral surface scarlet on basal half. Fore wing deep scarlet, the costa black-brown, slightly expanding before and beyond end of cell and glossed with blue at middle; the inner margin black-brown; the terminal area broadly black-brown extending as a broad fascia on inner area to middle. Hind wing black-brown with slight pale scarlet streaks on base of median nervure and vein 1. Underside black-brown; fore wing with the basal half

yellow except at costa; hind wing with the basal half yellow except on inner area, its outer edge irregular.

Hab. Dutch N. Guinea, Mimika R. (*Wollaston*), 1 ♂ type. *Exp.* 34 millim.

663 *b*. **Chionæma croceizona**, n. sp. (Plate XXXIII. fig. 16.)

♀. Head black, the frons with a bluish gloss; thorax orange-yellow; pectus and legs black, the pectus yellow in front, the legs glossed with silvery blue; abdomen dark brown, the terminal segments and ventral surface yellow. Fore wing black-brown, with a broad rather oblique orange-yellow postmedial band expanding somewhat above inner margin. Hind wing black-brown, with a broad orange-yellow band from costa before apex to tornus where it narrows to a point.

Hab. Dutch N. Guinea, Wataikwa R. (*Wollaston*), 1 ♀ type. *Exp.* 40 millim.

*664 *a*. **Chionæma omisa.**

Clerckia omisa, Roths. Nov. Zool. viii. p. 409 (1901), & x. pl. 11. f. 7.

♀. Head, thorax, and abdomen black; tegulæ and patagia orange tinged with scarlet; throat and fore coxæ scarlet; abdomen with the extremity orange. Fore wing orange, the costal area scarlet; a small black patch at base; a black fascia on costa to near middle, then the costal edge only black; an antemedial somewhat quadrate black patch below the cell; the terminal third of wing black, its inner edge incurved in discal fold and below vein 3 strongly incurved to middle of inner margin. Hind wing orange with terminal black band broad at costa narrowing to a point at tornus, its inner edge incurved towards costa.

Hab. Solomon Is., Guadalcanar I., type † ♀ in Coll. Rothschild. *Exp.* 38 millim.

664 *b*. **Chionæma isabella.**

Clerckia miles, isabella, Roths. Nov. Zool. viii. p. 410 (1901).
Clerckia miles, cybdela, Jord. Nov. Zool. xii. p. 79 (part.), pl. 5. f. 10 (1905).

♂. Black shot with brilliant blue; head and thorax with some metallic blue; neck at sides and below deep orange; abdomen with the anal tuft deep orange except dorsally. Fore wing with medial crimson band not quite reaching costa or inner margin, wide from costa to below the cell where it is angled, then narrowing, or broader on inner area and reaching inner margin.

♀. Fore wing with very broad scarlet medial band, its inner edge bent outwards obliquely from subcostal nervure to submedian fold, its outer edge excurved from discal fold to vein 2. Hind wing with very broad orange medial band extending on costa from

before middle to near apex, not quite reaching inner margin near tornus, its inner edge irregular, its outer edge curved.

Hab. Solomon Is., Isabel I. (*Meek*), 2 ♂, Bougainville I. (*Meek*), 1 ♂. *Exp.* 32 millim. Type † ♂, ♀ in Coll. Rothschild.

*666 *a*. Chionæma punctistrigosa.

Chionæma punctistrigosa, Roths. Nov. Zool. xx. p. 225 (1913).

Fore wing of male with veins 3, 4 becoming coincident well before termen.

♂. Head and thorax yellow, the patagia at base and prothorax with paired black spots, the metathorax with black spots at sides and one behind; palpi fuscous at sides; pectus in front and fore and mid femora and tibiæ with some fuscous; abdomen yellow dorsally suffused with fuscous at middle and ventrally with fuscous bands. Fore wing yellow; subbasal black spots below costa and cell; antemedial black spots below costa, in cell and on vein 1; a black spot tinged with metallic blue in middle of cell, another towards extremity, and one at upper angle; an oblique medial

Fig. 191.—*Chionæma punctistrigosa*, ♂. ½.

black-brown band from submedian fold to inner margin; a fuscous spot below costa above end of cell, postmedial black spots on costa and beyond the cell, and two incurved irregularly waved fuscous lines from and from beyond lower angle of cell to inner margin, the outer giving off short fasciæ below vein 4 and at submedian fold; a diffused oblique fuscous fascia from apex to beyond the cell and a subterminal shade; two fuscous spots on termen below apex. Hind wing yellow; the terminal area reddish brown, broadly at apex, narrowing to tornus. Underside of fore wing and costal area of hind wing suffused with brown, the latter with brown discoidal spot.

Hab. Br. N. Guinea, Mt. Goliath (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 28 millim.

*666 *b*. Chionæma transfasciata. (Plate XXXIII. figs. 17 ♂, 18 ♀.)

Ilema transfasciata, Roths. Nov. Zool. xix. p. 222 (1912).

♂. Head and thorax yellowish white, the tegulæ and patagia

orange-yellow; antennæ brownish except at base; palpi with some blackish at side of 2nd joint; prothorax with pair of blackish spots; abdomen yellowish white; pectus, legs, and ventral surface of abdomen orange-yellow, the fore and mid tibiæ with blackish bands towards extremities. Fore wing yellowish white, the terminal area tinged with orange-yellow; an oblique subbasal blue-black band from costa to vein 1; an erect straight antemedial blue-black band; an erect straight postmedial blue-black band narrowing somewhat to costa; a blue-black spot below costa beyond the costal lobe and an erect straight blue-black band from below it to inner margin towards which it narrows somewhat. Hind wing pale yellow.

♀. Fore wing with the subbasal band slightly curved and not oblique, the antemedial band slightly excurved in cell, an oblique straight medial blue-black band, no spot beyond the costal lobe but the subterminal band extending to below costa.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 26, ♀ 34 millim.

*666 *c*. **Chionæma nigroplagata.** (Plate XXXIII. fig. 19.)

Chionæma nigroplagata, Beth.-Baker, A. M. N. H. (8) vi. p. 442 (1910).

♂. Head and thorax creamy white; palpi, antennæ, and large patches on shoulders fuscous brown; tibiæ and tarsi banded black and white; abdomen creamy white. Fore wing creamy white; antemedial, medial, and postmedial fuscous brown patches on costal area; some brown suffusion in and below the cell; antemedial and medial blackish lines from the cell to a trilobate patch at middle of inner margin, the former angled inwards, the latter outwards in submedian fold; an oblique crenulate blackish line arising from a small spot on costa beyond the postmedial patch and ending at submedian fold, confluent below vein 4 with a large blackish patch beyond it which extends to inner margin; a terminal series of blackish points, the three towards apex small spots with streaks beyond them on the cilia. Hind wing creamy white with traces of a subterminal brown shade from vein 7 to 2.

Hab. Br. N. Guinea, Mt. Kebea (*Pratt*), type † ♂ in Coll. Bethune-Baker. *Exp.* 26 millim.

*666 *d*. **Chionæma inusitata.** (Plate XXXIII. figs. 20 ♂, 21 ♀.)

Chionæma inusitata, Beth.-Baker, A. M. N. H. (8) vi. p. 442 (1910).

♂. Head and thorax pale ochreous, the tips of tegulæ and the thorax tinged with brown; palpi and antennæ brown; tibiæ and tarsi ringed brown and white; abdomen ochreous suffused with brown. Fore wing pale ochreous; diffused brown patches on costal area near base and at middle, and a patch at middle of inner area with slight antemedial and medial lines from it to median

nervure, the former angled inwards, the latter outwards in submedian fold; the postmedial area suffused with brown from the fringe of scales on costa to inner margin, the inner edge of the area oblique, the outer expanding widely below vein 4, an ochreous spot on this area at inner margin; the termen slightly suffused with brown. Hind wing pale ochreous; the inner area tinged with brown, the terminal area suffused with brown, broadly at costa and narrowing to a point at tornus.

♀. Vertex of head white; tegulæ and patagia brown, the dorsum of thorax brown and white; fore wing white, a curved brown subbasal band from costa to above inner margin; a broad antemedial band with white spots on it below costa and in and below the cell, its inner edge angled outwards in cell and above vein 1 and its outer edge produced to points in cell and submedian fold, a small brown discoidal spot, a brown postmedial band slightly defined on outer side by white, angled outwards at discal and submedian folds and inwards at vein 2, the area beyond it brown with dentate white subterminal band from costa to submedian fold; hind wing brown, the base whitish.

Hab. Dutch N. Guinea, Arfak Mts. (*Pratt*), type †♂, ♀ in Coll. Kenrick. *Exp.* ♂ 28, ♀ 36 millim.

*666 *e*. Chionæma basialba. (Plate XXXIII. fig. 22.)

Chionæma basialba, Roths. Nov. Zool. xx. p. 192 (1913).

♀. Head, tegulæ, and front of thorax dark red-brown with a cupreous gloss, the rest of thorax white; pectus whitish mixed with brown; legs cupreous red-brown, the tibiæ at extremities and tarsi ringed with white; abdomen whitish tinged with brown, the ventral surface white. Fore wing dark red-brown with a golden cupreous gloss; the basal area creamy white, leaving a patch at base of costa and the costal edge cupreous brown; a creamy white patch on costa above end of cell, extending just into the cell; a small postmedial spot on costa; a rounded apical patch and a band from vein 3 to tornus leaving cupreous brown striæ on termen. Hind wing pale reddish brown. Underside of fore wing pale brown with two short streaks on postmedial part of costa and an apical patch white.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 30 millim.

667 *a*. Chionæma aroa.

Chionæma aroa, Beth.-Baker, Nov. Zool. xi. p. 423 (1904).
Chionæma brunnea, Beth.-Baker, Nov. Zool. xi. p. 423 (1904).

Fore wing of male with the lobe extremely elongate and with a costal fold before it on underside, the fringe of hair on upperside very long and with rough downturned hair and scales below it.

♂. Head and thorax dark golden brown with some whitish on

pro- and metathorax; pectus and base of legs whitish tinged with brown; abdomen fuscous brown with the anal tuft ochreous. Fore wing dark golden brown suffused with fuscous, some whitish scaling at extremity of costal fringe and above medial part of vein 1; an

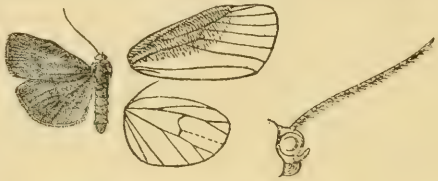

Fig. 192.—*Chionæma aroa*, ♂. ½.

indistinct oblique waved postmedial line from vein 6 to inner margin defined by whitish on outer side; two slight whitish marks just before termen below apex. Hing wing fuscous brown.

Hab. Dutch N. Guinea, Fak-fak (*Pratt*), 1 ♀; Br. N. Guinea, Up. Aroa R. (*Meek*), type † ♂ and type *brunnea* in Coll. Rothschild. *Exp.* 30 millim.

667 *b*. **Chionæma nigrescens.** (Plate XXXIII. fig. 23.)

Chionæma nigrescens, Roths. Nov. Zool. xx. p. 193 (1913).

♂. Head and thorax dark reddish brown glossed with silvery grey; abdomen grey suffused with reddish brown. Fore wing dark reddish brown glossed with silvery grey; antemedial line indistinct, dark, waved; traces of a dark medial shade; postmedial line indistinct, dark, waved and somewhat maculate, oblique to vein 6, then inwardly oblique; an indistinct curved dark subterminal shade. Hind wing grey suffused with reddish brown; the underside paler except the costal area and with blackish discoidal lunule.

♀. Fore wing with dark spots in middle of cell and on discocellulars.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂, ♀ in Coll. Rothschild; Goodenough I. (*Meek*), 1 ♂. *Exp.* 38 millim.

667. **Chionæma fumea**, insert (syn.):—

Chionæma charybdis, Beth.-Baker, Nov. Zool. xi. p. 423, pl. v. f. 27 (1904).

Br. N. Guinea, Dinawa (*Pratt*), type † ♂ in Coll. Bethune-Baker.

668 *a*. **Chionæma formosana.**

Chionæma formosana, Hmpsn. A. M. N. H. (8) iv. p. 355 (1909).

Antennæ of male bipectinate with short branches ending in a bristle.

Head, thorax, and abdomen white; palpi red-brown at sides;

tegulæ with scarlet tips; inner side of fore tibiæ and the tarsi red-brown. Fore wing white; the costa scarlet towards base; subbasal line scarlet, angled outwards in cell and ending at vein 1; antemedial line scarlet, excurved below costa and angled inwards below the cell; a small black spot in end of cell and two obliquely placed on discocellulars; postmedial line scarlet, broad, strongly excurved between discal and submedian folds; a terminal scarlet band with

Fig. 193.—*Chionæma formosana*, ♂. ½.

slightly waved inner edge, expanding at apex and angled inwards in submedian fold. Hind wing pale crimson, the costal area to beyond middle and the cilia white.

Hab. Formosa (*Elwes*), 1 ♀, Kagi Distr., 1 ♀ type, Rantaizan (*Wileman*), 1 ♂, 1 ♀. *Exp.* 44 millim.

*668 *b*. **Chionæma distincta.** (Plate XXXIII. fig. 24.)

Chionæma distincta, Roths. Nov. Zool. xix. p. 245 (1912).

♀. Head and thorax white; palpi black; antennæ brown except towards base; tegulæ crimson at tips, the patagia with crimson patches at middle, the meso- and metathorax with some crimson; fore tibiæ and tarsi almost wholly black-brown in front; abdomen white, dorsally suffused with crimson except at base and extremity. Fore wing white; subbasal crimson spots below costa and cell; antemedial line crimson, oblique, sinuous; a round black spot in middle of cell and spots in upper and lower extremities; postmedial line crimson, oblique from costa to vein 4; a curved crimson subterminal line from below costa to above inner margin. Hind wing white suffused with pale crimson except the costal area and termen. Underside white.

Hab. Burma, E. Pegu (*Doherty*), type † ♀ in Coll. Rothschild. *Exp.* 50 millim.

672 *a*. **Chionæma propinqua.** (Plate XXXIII. fig. 25.)

Chionæma propinqua, Wileman, Entom. xliii. p. 177 (1910).

♂. Head, thorax, and abdomen white, the tegulæ with dorsal crimson patch at tips and crimson outer edge, the patagia and mesothorax with crimson spots; palpi yellow at tips; antennæ yellow; fore and mid legs with the tibiæ banded with yellow, the tarsi yellow. Fore wing white; a crimson spot at base of costa

with fascia from it to the crimson subbasal band, which is excurved and dilated in the cell, excurved at vein 1, and ends above inner margin; a narrow crimson antemedial band, excurved to median nervure and angled inwards below the cell; a small black spot in end of cell and two discoidal spots; a crimson postmedial band, narrow and oblique from below costa to vein 4, then erect; a curved crimson band arising below costa and before termen where it is dilated, then terminal from vein 5 to above tornus. Hind wing crimson, the cilia white. Underside of fore wing crimson with some black suffusion in end of cell.

♀. Fore wing with the postmedial band arising further from base, slightly angled inwards at discal fold and excurved at middle.

Hab. Formosa, Kanshirei (*Wileman*), 1 ♂, type † ♂, ♀ in Coll. Wileman. *Exp.* ♂ 32, ♀ 40 millim.

673. Chionæma pitana.

Larva. Piepers, Tijd. v. Ent. xlvii. p. 153, pl. x. f. 7.

Black clothed with long grey hairs; subdorsal lines ochreous, conjoined by dorsal bands on 1st and anal somites. Food-plant, *Muscus*.

Cocoon, a slender network of hairs in which the pupa is suspended.

*671*a*. Chionæma aurantiorufa. (Plate XXXIII. fig. 26.)

Chionæma aurantiorufa, Roths. Nov. Zool. xix. p. 246 (1912).
Chionæma aurantiorufa, niasana, Roths. Nov. Zool. xix. p. 246 (1912).

♂. Head and thorax orange-buff, the tegulæ and patagia deeper orange at tips; abdomen orange-buff dorsally tinged with crimson except at base. Fore wing orange-buff, the terminal half tinged with crimson except at costa; antemedial line black with a faint deeper orange band on its outer side, excurved below costa, then straight and erect; a black spot in cell near extremity and two discoidal spots; postmedial line black with a faint deeper orange band on its inner side, obliquely bent outwards to costa and very slightly excurved beyond lower angle of cell. Hind wing orange-buff suffused with crimson except the base, costa and cilia. Underside of fore wing suffused with crimson except the costa.

Ab. 1. *niasana*. Fore wing with hardly a trace of crimson and the bands almost obsolete; hind wing paler crimson; underside of fore wing not suffused with crimson.

♀. Fore wing with the black spot in cell and one discoidal spot, the postmedial line oblique from costa to vein 6 and from submedian fold to inner margin.

Hab. Sumatra, Batang Proepoe, Padang Bovenlanden, type † ♂ in Coll. Rothschild; Nias, Hili Madjedja, type † ♂, ♀ *niasana* in Coll. Rothschild. *Exp.* ♂ 30, ♀ 40 millim.

676. Chionæma bianca.

Larva. Piepers, Tijd. v. Ent. xlvii. p. 154, pl. x. f. 8.

Greenish grey; head and 1st somite orange, the 3rd somite and the penultimate somite with two ochreous warts; two dorsal black lines; the abdominal somites except the two terminal ones with lateral red warts and yellow lateral line; the warts with long black hairs. Food-plant, *Muscus*.

Pupa silvery, suspended in a cocoon of slender network formed of hairs.

676 *a*. Chionæma ridleyi, trans. from p. 300.

♀. Fore wing with veins 4, 5 from cell; hind wing entirely suffused with crimson, the termen curved.

*676 *b*. Chionæma quadripartita. (Plate XXXIII. fig. 27.)

Chionæma quadripartita, Wileman, Entom. xliii. p. 177 (1910).

♂. Head, thorax, and abdomen white, the tegulæ edged with crimson, the patagia crimson at tips, the mesothorax with crimson band, and the metathorax with crimson spot; palpi ochreous except at base; antennæ ochreous; tibiæ and tarsi banded with ochreous. Fore wing white; a crimson subbasal band from costa to below vein 1, narrowing below; an antemedial crimson band, expanding somewhat at costa and with some black scales on its inner edge; a black spot in end of cell and two discoidal spots; an oblique crimson postmedial band, expanding into a patch at costa where it encloses a small white spot, slightly excurved at middle, and with some black scales on its outer edge; a crimson terminal band with slightly waved inner edge; cilia white. Hind wing pale crimson, the cilia white. Underside of fore wing suffused with crimson.

♀. Fore wing without the black spot at lower angle of cell, the postmedial band not expanding at costa; hind wing deeper crimson.

Hab. Formosa, Kanshirei (*Wileman*), type †♂, ♀ in Coll. Wileman. *Exp.* ♂ 36, ♀ 40 millim.

679 *a*. Chionæma rubritermina. (Plate XXXIII. fig. 28.)

Chionæma rubritermina, Beth.-Baker, A. M. N. H. (8), vii. p. 534 (1911).
Chionæma rubriterminalis, Strand, Arch. Naturg. lxxviii. 7, p. 188 (1912).

Head, thorax, and abdomen white; tegulæ black at tips; fore and mid legs and hind tarsi fulvous. Fore wing white; a subbasal black spot below the cell; a fine curved pale crimson almost medial line; a round black spot in cell towards extremity and a spot at

lower angle; postmedial line fine, pale crimson, oblique from costa to vein 4, bent inwards below vein 3, then oblique to inner margin; a fine pale crimson terminal line from apex to submedian fold. Hind wing white. Underside of fore wing with the basal half of costa pale crimson.

Hab. Gold Coast, Bibianaha (*Spurrell*), 3 ♀; S. Nigeria, Lagos (*Lamborn*), type † ♂ in Mus. Oxon, *Exp.* 18–26 millim.

682 *a*. **Chionæma capensis.** (Plate XXXIII. fig. 29.)

Chionæma capensis, Hmpsn. A. M. N. H. (7) xi. p. 347 (1903).

♂. White; palpi, tegulæ at base, and fore legs orange. Fore wing with some black scales at base of costa; an irregular waved orange subbasal band with black scales on its outer edge; an antemedial band with black line on its inner edge, incurved to costa then oblique, a black point just beyond it in the cell; the postmedial band expanding into a patch at costa, oblique to vein 3, then erect and ending at tornus, some black scales on its outer side and traces of a black discoidal point on its inner side. Underside of fore wing with the costa orange to near apex.

Hab. Cape Colony, Grahamstown, 1 ♂ type. *Exp.* 22 millim.

*682 *b*. **Chionæma flavalba.** (Plate XXXIII. fig. 30.)

Chionæma flavalba, Roths. Nov. Zool. xix. p. 246 (1912).

♂. Head, thorax, and abdomen white; tegulæ and patagia except at base yellow; fore legs tinged with brown. Fore wing white; a yellow subbasal bar from costa to submedian fold; antemedial line yellow, oblique, straight; a minute black spot in middle of cell and another in upper angle; postmedial line yellow, excurved below costa and very slightly incurved below vein 4, some yellow beyond it below the costal fringe, then on costa to apex; a narrow yellow terminal band. Hind wing white. Underside of fore wing with the costa yellow.

Hab Penang, Government Hill (*Curtis*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

684 *a*. **Chionæma rhodostriata**, n. sp. (Plate XXXIII. fig. 31.)

♂. Head, thorax, and abdomen white; antennæ brownish; lower part of frons brown, the palpi scarlet; fore and mid tibiæ banded with black, the tarsi black ringed with white. Fore wing white; the costa streaked with scarlet towards base; subbasal black spots below costa and in cell; an antemedial black band from costa to median nervure, with a scarlet streak on it on subcostal nervure, its outer edge somewhat angled outwards at costa and subcostal nervure; a black discoidal spot; a rather oblique

series of small black partly conjoined spots from costa to vein 6 just beyond the cell and a curved postmedial series of points on veins 4 to 1; pale reddish brown marks on termen from apex to vein 4. Hind wing white. Underside of fore wing with the costal area red towards base.

Hab. Natal, Maritzburg, 1 ♂ type. *Exp.* 34 millim.

685. Chionæma trigutta.

Larva. Auriv. Ark. f. Zool. ii. 4, p. 34 (1904).

Thickly clothed with hair, the warts with long hairs.

687. Chionæma rejecta, insert (syn.) :—

Lithosia bipunctigera, Wllgrn. Wien. Ent. Mon. iv. p. 45 (1860).

687 *a*. Chionæma straminea, n. sp. (Plate XXXII. fig. 21.)

♀. Head and thorax ochreous yellow; abdomen white, the ventral surface ochreous. Fore wing ochreous yellow; minute black spots in middle of cell and on discocellulars. Hind wing white. Underside of fore wing white tinged with ochreous, especially on costal area.

Hab. Formosa, Kanshirei (*Wileman*), 1 ♀ type. *Exp.* 22 millim.

691 *a*. Chionæma basisticta, n. sp. (Plate XXXII. fig. 22.)

♀. Head and thorax white slightly tinged with brown; antennæ brown, blackish towards base; patagia with black points near base; fore tibiæ and the tarsi yellow. Fore wing white; a subbasal pale crimson point on costa and black point below the cell; antemedial line pale crimson, slightly incurved at median nervure; black points in middle of cell and on discocellulars; postmedial line pale crimson, slightly excurved below costa and strongly at middle; a slight crimson line before termen, ending at vein 2. Hind wing white. Underside white; fore wing with orange streak on costa before middle.

Hab. Gold Coast, Aburi (*Armstrong*), 1 ♀ type. *Exp.* 24 millim.

*694 *a*. Chionæma bicolor. (Plate XXXIII. fig. 32.)

Chionæma bicolor, Roths. Nov. Zool. xx. p. 192 (1913).

♂. Head, tegulæ, and shoulders black suffused with metallic blue; thorax orange-yellow; pectus and legs black-brown, the fore coxæ glossed with blue; abdomen black-brown, the anal tuft and

ventral surface orange-yellow. Fore wing orange-yellow; the costal edge black-brown emitting a spur to submedian fold close to the base; the terminal area broadly black-brown, its inner edge curved inwards to costa. Hind wing orange-yellow; some black-brown hair in the fold above inner margin except at base; the terminal area black-brown, broad at costa, narrowing to tornus.

Hab. German N. Guinea, type † ♂ in Coll. Rothschild. *Exp.* 36 millim.

*694 *b*. Chionæma biagi. (Plate XXXII. fig. 23.)

Chionæma biagi, Beth.-Baker, Nov. Zool. xv. p. 195 (1908).

♂. Head, thorax, and abdomen fuscous brown mixed with whitish; legs whitish, the tarsi brown ringed with white. Fore wing whitish suffused with fuscous brown leaving a broad whitish antemedial band irrorated with brown and with somewhat waved edges; a slight whitish discoidal lunule; postmedial line indistinct, dark, bent outwards between veins 7 and 4, minutely dentate, the area beyond it whitish irrorated with brown; an indistinct diffused dark subterminal line, angled outwards at veins 7, 6, 4. Hind wing white tinged with brown.

Hab. Br. N. Guinea, Biagi (*Meek*), type † ♂ in Coll. Bethune-Baker. *Exp.* 26 millim.

694 *c*. Chionæma asticta.

Chionæma asticta, Hmpsn. A. M. N. H. (8) iv. p. 355 (1909).

Fore wing of male with vein 5 from middle of cell, 6 from upper angle, 7 and 9 stalked, 8 absent, the lobe represented by a slight distortion and veins 10, 11 almost obsolete; of female with vein 5 from lower angle of cell, 6 stalked with 7 and 9, 10, 11 from cell.

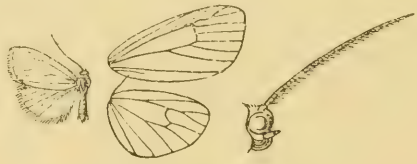

Fig. 194.—*Chionæma asticta*, ♂. ½.

White; palpi blackish; antennæ tinged with fuscous except at base; tegulæ edged with orange in male; fore legs tinged with fuscous in front. Fore wing with the costal edge orange to beyond middle; the underside with the costa suffused with orange.

Hab. Queensland, Kuranda (*Dodd*), 1 ♂, 1 ♀ type. *Exp.* 22 millim.

694 *d*. Chionæma phæocraspis. (Plate XXXII. fig. 24.)

Chionæma phæocraspis, Hmpsn. A. M. N. H. (8) iv. p. 356 (1909).

♂. Pure white; palpi fuscous; fore and mid legs tinged with brown. Fore wing with the costal edge brown to beyond middle; the underside with the costal area tinged with yellow.

Hab. Louisiades, St. Aignan (*Meek*), 1 ♂ type. *Exp.* 20 millim.

695 *a*. Eurosia fuliginea. (Plate XXXII. fig. 25.)

Eurosia fuliginea, Hmpsn. A. M. N. H. (7) xi. p. 347 (1903).

♂. Fuscous black with a bluish tinge. Fore wing with small round whitish discoidal spot and slight whitish marks in submedian fold just before middle and below end of cell. Hind wing with hyaline patch below basal half of cell.

♀. Head and thorax tinged with olive-brown. Fore wing with the ground-colour pale olive-brown; the basal half suffused with black leaving whitish subbasal and antemedial spots below the cell; black spots in middle and at end of cell with a white spot between them; a diffused black postmedial line excurved round end of cell, then retracted; a diffused maculate subterminal band; a spot on middle of termen.

Hab. Natal, Durban (*Leigh*), 2 ♂ type; C. Colony, Annshaw (*Miss F. Barrett*), 1 ♀. *Exp.* 18 millim.

696. Eurosia acanthocera.

Eurosia accepta, Hmpsn. Cat. Lep. Phal. B.M. ii. p. 330 (part.).
Eurosia acanthocera, Hmpsn. A. M. N. H. (7) xv. p. 434 (1905).

696 *a*. Eurosia puncticosta.

Eurosia puncticosta, Hmpsn. A. M. N. H. (8) viii. p. 403 (1911).

Antennæ of male ciliated; hind wing with veins 3, 4 shortly

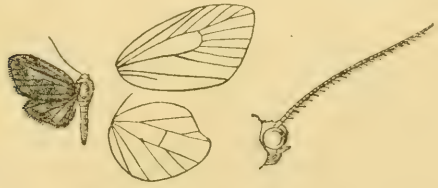

Fig. 195.—*Eurosia puncticosta*, ♂. ⅔.

stalked, the costa strongly lobed and the apex truncate.

♂. Head, thorax, and abdomen red-brown, the last dorsally tinged with fuscous. Fore wing red-brown; the costal edge blackish towards base; a black-brown point at middle of costa and postmedial striga from costa. Hind wing rather paler red-brown.

Hab. Moluccas, Batian (*Doherty*), 1 ♂ type. *Exp.* 12 millim.

*701 *a*. **Eurosia bicolor.** (Plate XXXII. fig. 26.)

Lambula bicolor, Roths. Nov. Zool. xix. p. 214 (1912).

♀. Head, tegulæ, and patagia white; thorax and abdomen whitish suffused with fuscous brown, the anal tuft ochreous white; palpi, pectus, legs, and ventral surface of abdomen pale reddish brown. Fore wing creamy white suffused with fuscous brown with a cupreous gloss except at base, on costal area and terminal area to vein 2, forming rather darker spots in and beyond upper angle of cell. Hind wing creamy white. Underside of fore wing wholly suffused with brown.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 18 millim.

*701 *b*. **Eurosia substrigillata.** (Plate XXXII. fig. 27.)

Lambula substrigillata, Roths. Nov. Zool. xix. p. 214 (1912).

♀. Head and tegulæ white; thorax white tinged with rufous; palpi, pectus, and legs white suffused with brown; abdomen grey-brown, the anal tuft ochreous white. Fore wing creamy white tinged and slightly irrorated with red-brown; dark points on costa at and beyond middle and towards apex and on apical half of termen. Hind wing creamy white tinged with rufous. Underside of fore wing suffused with brown.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 20 millim.

702 *a*. **Eurosia accepta**, trans. from p. 330 and insert (syn.) :— (Plate XXXII. fig. 28.)

Graptasura bitincta, Roths. Nov. Zool. xx. p. 204 (1913).

Little Kei I. (*Kühn*), type † ♂ in Coll. Rothschild.

703. **Licnoptera crocodora**, insert (syn.) :—

Chrysallactis apiciplaga, Roths. Nov. Zool. xx. p. 194 (1913).

Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♂ in Coll. Rothschild.

Genus **STENEUGOA**, nov.

Type, *S. nubilosa*.

Proboscis fully developed; palpi upturned, slender, the 2nd joint reaching to near vertex of head, the 3rd short; frons smooth; antennæ of male bipectinate with short branches ending in a bristle, the apex ciliated; tibiæ with the spurs long. Fore wing long and narrow, the apex rounded, the termen evenly curved; vein 3 from well before angle of cell; 4, 5 from angle; 6 from upper angle; 7, 8, 9 stalked; 10, 11 from cell. Hind wing with veins 3, 4 shortly stalked; 5 from just above angle; 6, 7 shortly stalked; 8 from middle of cell.

In key differs from *Callisthenia* in the fore wing having vein 3 from before angle of cell; hind wing with veins 3, 4 stalked.

706 *a*. **Steneugoa nubilosa**, n. sp.

Head, thorax, and abdomen pale ochreous brown; palpi and fore tibiæ tinged with fuscous. Fore wing pale ochreous brown irrorated and in parts suffused with dark brown; subbasal line represented by an angled black mark from costa and small spot below the cell; antemedial line diffused, blackish, oblique, sinuous; small blackish spots in middle of cell and on discocellulars; medial line diffused,

Fig. 196.—*Steneugoa nubilosa*, ♂. ½.

blackish, excurved beyond the cell, then oblique; postmedial line indistinct, diffused, oblique; traces of a diffused sinuous subterminal line; a series of minute blackish points before termen; a fine dark terminal line; cilia ochreous with a brown line through them. Hind wing ochreous white, the terminal area suffused with brown, narrowing to tornus; the underside with the costal area suffused with brown.

Hab. Dutch N. Guinea, Wataikwa R. (*Wollaston*), 2 ♂ type, Mimika R. (*Wollaston*), 2 ♀. *Exp.* 26 millim.

707 *a*. **Meteugoa fasciosa**.

Meteugoa fasciosa, Roths. Nov. Zool. viii. p. 424 (1901), and x. pl. xi. f. 9.

♂. Head and thorax white; palpi except at tips and antennæ black; vertex of head and mesothorax with some black; pectus and legs black, the tibiæ and tarsi streaked with white; abdomen black, the ventral surface with white segmental lines and the elongate claspers whitish below. Fore wing white; diffused subbasal black spots below costa and cell; nearly straight antemedial and medial

bands; spots in middle of cell and on discocellulars; a subterminal band expanding towards costa and tornus and emitting a streak to termen at middle; a terminal band. Hind wing fuscous black; a triangular white patch below and beyond end of cell with a small spot below it above tornus.

♀. Hind wing with large rather triangular white patch from medial part of costa to above tornus, a minute blackish spot at upper angle of cell.

Hab. Solomon Is., Isabel I. (*Meek*), 1 ♂, 1 ♀. *Exp.* 32 millim. Type † ♂ in Coll. Rothschild.

708 *a*. **Meteugoa melanoleuca.** (Plate XXXII. fig. 29.)

Meteugoa melanoleuca, Hmpsn. A. M. N. H. (7) viii. p. 184 (1901).

♂. Palpi not reaching vertex of head. Black; head, tegulæ, patagia, fore and mid legs irrorated with white scales. Fore wing with white antemedial band very broad at inner margin, narrowing to costa; a white subapical spot. Hind wing with white band extending from near base to beyond middle and not reaching inner margin.

Hab. Br. N. Guinea, Milne Bay (*Meek*), 1 ♂ type. *Exp.* 22 millim.

Genus **CASTRONIA.**

	Type.
Castronia, D. Jones, Trans. Ent. Soc. 1912, p. 420	*apostata.*

Proboscis aborted, minute; palpi porrect, very small; antennæ of male bipectinate with long branches to apex; hind tibiæ with two pairs of minute spurs. Fore wing with vein 3 from well before angle of cell; 5 from just above angle; 6 from upper angle; 7, 8 stalked, 9 absent; 10, 11 from cell. Hind wing with vein 3 from well before angle of cell; 5 from well above angle; 6, 7 from upper angle; 8 from middle of cell.

In key differs from *Eutelesia* in the proboscis being aborted and the hind wing with veins 6, 7 from the cell.

*711 *a*. **Castronia apostata.**

Tessellota apostata, Schaus, Pr. U.S. Nat. Mus. xxix. p. 227 (1905).
Castronia collaris, D. Jones, Trans. Ent. Soc. 1912, p. 421.

♂. Head, thorax, and abdomen black-brown, the back of head

Fig. 197.—*Castronia apostata*, ♂. ½.

with two yellow patches; tegulæ yellow; abdomen with lateral orange fasciæ on terminal segments and the extremity orange.

Fore wing semihyaline brown, the veins and a fine terminal line dark. Hind wing uniform black-brown.

Hab. Brazil, Castro Paraña, type † ♂ in U.S. Nat. Mus. and type † ♂ *collaris* in Coll. D. Jones. *Exp.* 32 millim.

712. **Comacla simplex,** insert (syn.) :—

Ameria texana, French, Can. Ent. xxi. p. 161 (1889), and xxxi. p. 9; Kirby, Cat. Het. p. 353.

*712 *a*. **Comacla fuscipes.**

Vanessodes fuscipes, Grote, Can. Ent. xv. p. 86 (1883); Barnes & McD. Contr. Nat. Hist. Lep. N. Am. i. 4, pl. xi. f. 11; Dyar, Cat. Lep. N. Am. p. 80.

♂. Differs from *C. simplex* in the abdomen being entirely grey. Fore wing rather broader and more irrorated with dark scales; antennæ less strongly pectinated.

Hab. U.S.A., Arizona. *Exp.* 22 millim. This species is unknown to me.

713. **Comacla senex,** insert :—

Ab. *fumosa*, Bankes, Entom. xlii. p. 60 (1909).
Much browner.

Genus **CHRYSOCYMA.**

Type.
Chrysocyma, Hmpsn. A. M. N. H. (7) xv. p. 435 (1905) ..... *mesopotamia*

Proboscis absent; palpi extending to just beyond frons and clothed with long hair; antennæ of male with very long, rather widely separated branches; hind tibiæ with one pair of spurs and fringed with long hair on outer side. Fore wing short and broad, the apex rounded; veins 3 and 5 from near angle of cell; 6 fronn upper angle; 7, 8, 10 stalked, 9 absent, 10 from near apex; 11 from cell. Hind wing with veins 3, 4 from angle of cell; 5 from well above angle; 6, 7 stalked; 8 from towards end of cell.

In key differs from *Nyctosia* in the fore wing having veins 7, 8, 10 stalked, 9 absent.

714 *a*. **Chrysocyma mesopotamia.**

Chrysocyma mesopotamia, Hmpsn. A. M. N. H. (7) xv. p. 435 (1905).

♂. Deep orange; antennæ with the branches blackish. Fore

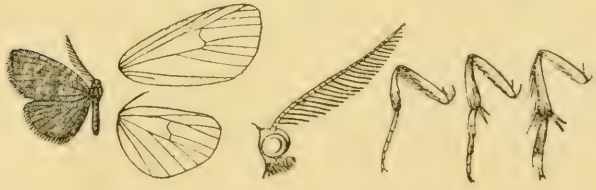

Fig. 198.—*Chrysocyma mesopotamia*, ♂. ½.

wing with two subbasal, two antemedial, and two postmedial pale waved lines, a small blackish discoidal spot.

Hab. Zanzibar, 1 ♂; Br. C. Africa, Chinde (*De Jersey*), 1 ♂; Mashonaland, Salisbury (*Dobbie*), 3 ♂ type. *Exp.* 24 millim.

719 *a*. **Balbura fasciata.** (Plate XXXII. fig. 30.)

Balbura fasciata, Schaus, A. M. N. H. (8) vii. p. 361 (1911).

♂. Head, thorax, and abdomen black-brown, the patagia orange-red. Fore wing pale grey-brown; an orange-red patch at base with some black suffusion beyond it; the costa black-brown; a black-brown streak below basal half of costa with slight oblique streak beyond it; black-brown streaks in discal and submedian folds; a diffused black-brown medial band; the terminal area with black-brown streaks above veins 6, 5, 4, 3; cilia black-brown. Hind wing fuscous. Underside fuscous brown, the inner and terminal areas of hind wing greyish.

Hab. Costa Rica, Guapiles (*Schaus*), 1 ♂. *Exp.* 36 millim.

719 *b*. **Balbura intervenata.**

Balbura intervenata, Schaus, A. M. N. H. (8) vii. p. 361 (1911).

Abdomen of male with the terminal segments clothed with rough hair; hind wing with the inner margin forming a large lobe fringed with long hair. Head black-brown; thorax orange-red with the tegulæ and outer edge of patagia black-brown; pectus,

Fig. 199.—*Balbura intervenata*, ♂. ½.

legs, and abdomen black-brown with a faint bluish gloss. Fore wing fuscous brown, the inner area suffused with black-brown, the veins of terminal half streaked with black-brown. Hind wing black-brown, the cell and area just below it somewhat semihyaline. Underside of fore wing black-brown.

Hab. Costa Rica, Sixola R. (*Schaus*), 1 ♀; Panama, La Chorrera (*Dolby-Tyler*), 1 ♀. *Exp.* 30 millim. Type † ♂ in U.S. Nat. Mus.

*720*a*. **Lithoprocris hamon.** (Plate XXXII. fig. 31.)

Saurita hamon, Druce, A. M. N. H. (7) ix. p. 322 (1902).

♂. Head and thorax cupreous brown, the vertex of head shot with purple; abdomen metallic blue. Fore wing golden cupreous, the base shot with purple. Hind wing purple-blue, the costal area brown; a large hyaline patch in and below the cell.

Hab. Peru, Canchamayo, type † ♂ in Coll. Joicey. *Exp.* 32 millim.

*721 *a*. **Lithoprocris postcœrulescens.**

Lithoprocris postcœrulescens, Roths. Nov. Zool. xx. p. 194 (1913), ♂.

Hind wing of male with the costa highly arched; the upperside with raised fold below the cell from near base to near termen, the inner margin with fringe of long scales; the underside with wedge-shaped patch of ochreous androconia from lower angle of cell to termen, the fold below the cell containing rough scales, the inner margin folded over and with fringe of scales; the subcostal nervure closely approximated to the median nervure and the costal area very wide, veins 8 and 6, 7 obliquely bent up to it.

Fig. 200.—*Lithoprocris postcœrulescens*, ♂. ½.

♂. Head, thorax, and abdomen metallic green, the genital tufts reddish brown. Fore wing metallic green, the termen and cilia brilliant metallic blue. Hind wing metallic green, the fold below the cell defined on each side by semihyaline whitish, the fringe of scales on inner margin dark brown; the underside with the scales in the fold below the cell black, the fold and fringe on inner area dark brown with a silvery gloss, the patch of androconia beyond the cell ochreous.

Hab. Peru, R. Inambari, La Oroya (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 22 millim. Possibly the male of *L. jason*.

723*a*. **Dipæna incontenta.** (Plate XXXII. fig. 32.)

Dipæna incontenta, Schaus, Pr. U.S. Nat. Mus. xxix. p. 198 (1905).

♂. Head, thorax, and abdomen black shot with metallic blue, the last with the last two segments and part of the 3rd scarlet

above; anal tuft scarlet. Fore wing black-brown suffused with cupreous red, the costal area from before middle to near apex and the inner area except at base shot with purple. Hind wing black-brown, the terminal area shot with brilliant blue narrowing to apex. Underside of both wings shot with brilliant blue.

Hab. Fr. Guiana, St. Jean Maroni, 1 ♂, type † ♂ in U.S. Nat. Mus. *Exp.* 26 millim.

727. Cloesia parthia.

The male has a large fold in cell of hind wing containing two fringes of brown hair.

727 *a*. Cloesia digna. (Plate XXXII. fig. 33.)

Cloesia digna, Schaus, A. M. N. H. (8) vii. p. 362 (1911).

♂. Head, thorax, and abdomen black suffused with brilliant metallic blue; the extremities of hind tibiæ and 1st joint of tarsi whitish behind. Fore wing black suffused with brilliant metallic blue. Hind wing black suffused with brilliant metallic blue, the costal area and submedian interspace except a wedge-shaped patch on terminal area somewhat semihyaline and clothed with black scales. Underside of both wings black suffused with brilliant metallic blue; the hind wing with slightly semihyaline streaks below the cell and above vein 1.

Hab. Costa Rica, Sixola R. (*Schaus*), 1 ♂. *Exp.* 30 millim.

*727 *b*. Cloesia normalis. (Plate XXXII. fig. 34.)

Cloesia normalis, Dogn. Hét. Nouv. Am. Sud, iii. p. 8 (1911).

Hind wing of male without fold and fringe of hair in cell.

♂. (Head wanting.) Thorax and abdomen black-brown suffused with metallic blue-green. Fore wing black-brown suffused in parts with metallic blue-green especially on costal area. Hind wing black-brown suffused in parts with metallic blue-green especially on inner and terminal areas. Underside of both wings mostly suffused with metallic blue-green.

Hab. Colombia, Alto de las Cruces (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 38 millim.

728. Eudoliche vittata, insert (syn.) :—

Eudoliche rufitincta, Roths. Nov. Zool. xx. p. 195 (1913).

Surinam, Maroewyn Valley, Aroewarwar Creek (*Klages*), type † ♂ in Coll. Rothschild.

*728 *a*. **Eudoliche major.** (Plate XXXIV. fig. 1.)

Eudoliche major, Roths. Nov. Zool. xx. p. 195 (1913).

♀. Head and thorax white mixed with rufous; abdomen white dorsally suffused with brown except at base, ventrally suffused with rufous. Fore wing white; diffused subbasal rufous patches on costa and below the cell; an antemedial spot on costa; a diffused patch in cell conjoined to the subbasal patches and obscure line from cell to above inner margin, a patch beyond it in submedian interspace conjoined to a large patch in and beyond the cell defined by the very indistinct postmedial line, which is very oblique from costa to above vein 6, then obliquely curved to inner margin; a subapical rufous patch connected with the apex by short streaks on the veins, a subterminal patch between veins 5 and 2, and a patch on inner margin conjoined to the postmedial line. Hind wing white faintly tinged with rufous.

Hab. Peru, Carabaya, R. Huacamayo (*Ockenden*), type † ♀ in Coll. Rothschild. *Exp.* 34 millim.

728 *b*. **Eudoliche longa.**

Eudoliche longa, Schaus, Pr. U.S. Nat. Mus. xxix. p. 198 (1905).

Hind wing with veins 3, 4 stalked.

♂. Yellowish white; antennæ tinged with brown; patagia with some brown; tarsi ringed with brown towards extremity. Fore wing with the costa brown at base; a reddish brown subbasal spot below the cell; an antemedial spot on costa and obliquely placed spots in and below the cell; a wedge-shaped brown fascia along median

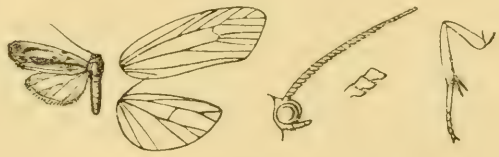

Fig. 201.—*Eudoliche longa*, ♂. ½.

nervure to the postmedial line, which arises at vein 7, is excurved to vein 4, then incurved, interrupted at submedian fold and ending at tornus; a discoidal point; brown spots on termen at apex and middle. Hind wing whiter.

Hab. Fr. Guiana, St. Jean Maroni (*Schaus*), 1 ♂. *Exp.* 22 millim. Type † ♂ in U.S. Nat. Mus.

Genus **DOLICHESIA.**

Type.
Dolichesia, Schaus, A. M. N. H. (8) vii. p. 362 (1911) ..... *falsimonia.*

Proboscis fully developed; palpi porrect to well beyond the frons and slightly fringed with hair below; frons smooth; eyes large, round; antennæ of female laminate and with some rough scales on shaft above towards base; tibiæ slightly fringed with hair. Fore wing with the costa highly arched, the apex produced to a rounded lobe, the termen obliquely incurved below the lobe; vein 3 from well before angle of cell; 5 from just above angle; 6 from upper angle; 7, 8, 9 stalked, 7 from beyond 9; 10 from cell; 11 anastomosing with 12. Hind wing with veins 3 and 5 from angle of cell, 4 absent; 6, 7 coincident; 8 from middle of cell.

In key differs from *Metalobosia* in the hind wing having veins 6, 7 coincident.

*728 *c.* **Dolichesia falsimonia.**

Dolichesia falsimonia, Schaus, A. M. N. H. (8) vii. p. 362 (1911).

♀. Head and thorax pale red-brown; pectus and base of legs white; abdomen crimson, the ventral surface white towards base. Fore wing grey suffused with red-brown; an oblique dark brown line from lower angle of cell to inner margin with a pale grey band before it indistinctly extending to costa; an oblique dark brown line from discal fold towards termen to inner margin with some pale grey before and beyond it; a terminal series of minute black

Fig. 202.—*Dolichesia falsimonia*, ♀. ⅔.

spots; cilia black with white points at base towards apex and tornus, a white patch at middle and white tips towards tornus. Hind wing crimson with terminal dark brown band, broad at costa and narrowing to a point at vein 1. Underside of fore wing and costa of hind wing dark brown.

Hab. Costa Rica, Sixola R. (*Schaus*), type † ♀ in U.S. Nat. Mus. *Exp.* 18 millim.

*728 *d.* **Dolichesia lignaria.** (Plate XXXIV. fig. 2.)

Dolichesia lignaria, Roths. Nov. Zool. xx. p. 195 (1913).

♂. Head and thorax pale rufous; abdomen crimson, the anal tuft black-brown above, the ventral surface pale rufous. Fore wing pale rufous irrorated with darker brown scales; indistinct oblique antemedial, medial, and postmedial lines formed by diffused black-brown scales from the cell and vein 4 to inner margin; cilia

black-brown between veins 3 and 1. Hind wing crimson with a black-brown terminal band, broad at costa and narrowing to a point at vein 1. Underside of fore wing with the area below the cell crimson to beyond middle, the rest of wing suffused with black-brown scales except towards apex.

Hab. Peru, Carabaya, R. Huacamayo (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

Genus **NEOTHYONE**, nov.

Type, *N. schistaceoplagiata*.

Proboscis aborted, minute; palpi porrect, slender, extending to just beyond the frons; antennæ of male laminate; hind tibiæ with the medial spurs absent. Fore wing rather short and broad, the apex rounded, the termen evenly curved; vein 2 from well beyond middle of cell; 3, 4 stalked; 5 from just above angle; 6, 7, 8, 9 stalked, 7 from beyond 9; 10, 11 from cell, 11 anastomosing with 12. Hind wing with vein 2 from well beyond middle of cell; 3, 4 stalked; 5 from well above angle; 6, 7 stalked nearly to apex; 8 from middle of cell.

In key differs from *Thyone* in the fore wing having veins 3, 4 stalked and vein 6 stalked with 7, 8, 9.

*728 *e*. **Neothyone schistaceoplagiata.**

Talara schistaceoplagiata, Roths. Nov. Zool. xx. p. 201 (1913).

♂. Head, thorax, and abdomen yellow suffused with scarlet; pectus, legs, and ventral surface of abdomen yellow, the fore tibiæ with some black hair at extremity. Fore wing yellow suffused with scarlet; traces of an unevenly oblique scarlet antemedial line; the medial area suffused with fuscous brown tinged with leaden

Fig. 203.—*Neothyone schistaceoplagiata*, ♂. ½.

grey except towards costa, its upper edge indented by a scarlet discoidal spot; an indistinct scarlet postmedial line bounding the dark area, obliquely curved from costa to vein 4, then incurved and ending at tornus; a narrow rather maculate scarlet band just before termen, the termen and cilia yellow. Hind wing pale scarlet, the cilia yellow. Underside pale scarlet, the apical area of fore wing and termen of hind wing yellow.

Hab. Peru, Carabaya, Oconeque (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

*728*f*. **Neothyone xanthæma.** (Plate XXXIV. fig. 3.)

Thyone xanthæma, Dogn. Mém. Soc. Ent. Belg. xix. p. 126 (1912).

♂. Head, thorax, and abdomen yellow slightly tinged with scarlet, the last with the ventral surface whitish. Fore wing yellow tinged with scarlet especially on the disk; a large patch of brownish suffusion in end of cell and from below end of cell to inner margin, conjoined to a brown spot beyond end of cell; a minute subbasal black streak below costa; an indistinct subterminal scarlet line. Hind wing yellow, the apex slightly tinged with scarlet. Underside of fore wing suffused with scarlet except the terminal area.

Hab. Fr. Guiana, Nouveau Chantier (*Le Moult*), type † ♂ in Coll. Dognin. *Exp.* 16 millim.

Page 346. Genus **THYONE**, insert:—

	Type.
Thyonæa, Dyar, Zoologica, N.Y. i. p. 127 (1910)	*perbella*.

*729*a*. **Thyone dremma.** (Plate XXXIV. fig. 4.)

Thyonæa dremma, Dyar, Zoologica, N.Y. i. p. 127, f. 41, no. 4 (1910).

Fore wing with vein 6 stalked with 7, 8, 9.

♂. Head yellow; thorax orange-brown; abdomen pale yellow. Fore wing orange-yellow, an oblique yellow medial band defined at sides by rather diffused purple-brown; the veins streaked with crimson except on the medial band. Hind wing yellow with a slight fuscous tinge.

Hab. Br. Guiana, Hoorie (*Beebe*). *Exp.* 17 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

729*b*. **Thyone perbella.**

Thyone perbella, Schaus, Pr. U.S. Nat. Mus. xxix. p. 198 (1905).

♂. Head, thorax, and abdomen orange-red; fore tibiæ in front

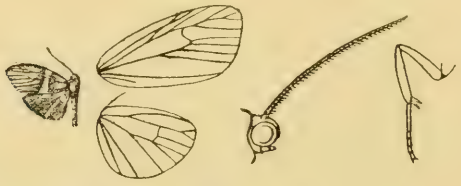

Fig. 204.—*Thyone perbella*, ♂. ½.

and tarsi at extremities blackish. Fore wing yellow suffused with scarlet, the veins with dark streaks; an outwardly oblique yellow

medial band defined on each side by brownish suffusion, especially on outer side towards inner margin. Hind wing yellow slightly tinged with scarlet; veins 3, 4 from cell.

Hab. Fr. Guiana, St. Jean Maroni (*Schaus*), 1 ♂, type † ♂ in U.S. Nat. Mus. *Exp.* 18 millim.

*729 *c.* **Thyone purpurea.**

Thyone purpurea, D. Jones, Trans. Ent. Soc. 1914, p. 8, pl. 1. f. 18.

♀. Head and thorax dark purple-brown with some metallic blue suffusion, the metathorax with yellowish white patch; abdomen dark brown with some metallic blue suffusion except at base. Fore wing dark purple-brown; some metallic blue suffusion at base and on costa; obliquely placed elongate ochreous white antemedial patches above and below vein 1; an ochreous white spot in the cell towards extremity and spot above it below the costa; a post-medial band formed of elongate ochreous white marks in the inter-spaces, the mark above inner margin rather nearer the base. Hind wing dark brown.

Hab. Brazil, Castro Paraña (*D. Jones*), type † ♀ in Coll. D. Jones. *Exp.* 36 millim.

731 *a.* **Thyone muricolor.** (Plate XXXIV. fig. 5.)

Thyone muricolor, Schaus, Pr. U.S. Nat. Mus. xxix. p. 198 (1905).

Head and thorax brown with a bluish gloss; abdomen blue-black. Fore wing brown with a bluish gloss. Hind wing black-brown.

Hab. Fr. Guiana, Cayenne (*Schaus*), 1 ♂; Brazil, São Paulo, Aracatuba; Argentina, Goya (*Perrens*), 1 ♀. *Exp.* 20 millim. Type † ♀ in U.S. Nat. Mus.

731 *b.* **Thyone grisescens.** (Plate XXXIV. fig. 6.)

Thyone grisescens, Schaus, A. M. N. H. (8) vii. p. 362 (1911).

♂. Head, thorax, and abdomen purplish grey, the last tinged with fuscous on terminal half; palpi at tips and legs tinged with fuscous. Fore wing uniform purplish grey. Hind wing somewhat duller purplish grey.

Hab. Costa Rica, Juan Vinas (*Schaus*), 1 ♂. *Exp.* 26 millim.

*731 *c.* **Thyone trimaculata.** (Plate XXXIV. fig. 7.)

Thyone trimaculata, D. Jones, Trans. Ent. Soc. 1908, p. 146.

♂. Pure white; fore legs and the mid tibiæ and tarsi black above. Fore wing with the costal edge black at base; a small

antemedial black spot above vein 1; a postmedial spot on vein 5 and bar-shaped spot between veins 2 and 1.

Hab. Brazil, Castro Paraña, type † ♂ in Coll. D. Jones. *Exp.* 26 millim.

*735 *a*. **Afrida tortricifascies.** (Plate XXXIV. fig. 8.)

Afrida tortricifascies, Dyar, Insec. Inscit. Menstr. i. 3, p. 28 (1913).

Head and thorax white tinged with grey-green, a brownish mark on prothorax; antennæ and palpi brownish; pectus and legs with some brown markings; abdomen whitish dorsally banded with brown. Fore wing white tinged with grey-green, the markings purplish black; antemedial line black, curved, from costa to submedian fold; a semicircular mark defined by black at middle of costa and a triangular mark at inner margin, its inner edge angled inwards at vein 1; the postmedial area with several faint interrupted dentate lines; some purplish suffusion on termen with a small round red spot before it at middle. Hind wing whitish, the termen suffused with fuscous; a dark discoidal point.

Hab. Haiti, San Francisco Mts. (*Busck*). *Exp.* 16 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

736 *a*. **Afrida mesomelæna**, n. sp. (Plate XXXIV. fig. 9.)

♀. Head and thorax white mixed with some black, the patagia with ochreous patches; antennæ black except at base; palpi black with white ring at extremity of 2nd joint; tarsi mostly black; abdomen black, the ventral surface brown. Fore wing white, tinged in parts with olive-yellow except on terminal area; the costal edge black towards base and with a black spot at base; antemedial band black, expanding into a patch at costa, angled outwards at median nervure and ending at vein 1; medial band blackish defined at sides by black lines, strongly constricted in the cell and less strongly at submedian fold, expanding widely at inner margin; some black marks on postmedial part of costa and a spot beyond the cell; a fuscous terminal shade, its inner edge sinuous and narrowing to tornus. Hind wing white suffused with fuscous. Underside white suffused with fuscous; fore wing with some white marks on costa towards apex; hind wing with black discoidal spot.

Hab. Jamaica (*Kaye*), 1 ♀ type. *Exp.* 22 millim.

736 *b*. **Afrida parvula.** (Plate XXXIV. fig. 10.)

Afrida parvula, Schaus, A. M. N. H. (8) vii. p. 363 (1911).

♂. Head, thorax, and abdomen grey suffused with brown; palpi and frons black-brown; antennæ brown. Fore wing white tinged with ochreous; the costal edge black towards base; a curved waved

black antemedial line from costa to vein 1; two minutely waved blackish medial lines and a similar postmedial line, excurved from below costa to vein 4, the area between them suffused with brown; a small black postmedial spot in discal fold; traces of a pale sinuous subterminal line, slightly defined on inner side by brown and with brown suffusion beyond it from below costa to submedian fold; a terminal series of brown striæ. Hind wing whitish tinged with brown especially on terminal area; the underside with diffused blackish postmedial line from costa to discal fold.

Hab. Costa Rica, Juan Vinas (*Schaus*), 1 ♂. *Exp.* 16 millim.

*736 *c*. **Afrida basiposis.** (Plate XXXIV. fig. 11.)

Afrida basiposis, Dyar, Insec. Inscit. Menstr. i. 3, p. 29 (1913).

♂. Head, thorax, and abdomen white tinged with olive-ochreous; antennæ blackish. Fore wing white suffused with olive-ochreous, the markings diffused; an oblique quadrate subbasal black patch on costa; a medial band of dark suffusion defined by irregularly dentate black lines; a small purplish black spot beyond the cell; the terminal area with dark suffusion. Hind wing white tinged with fuscous towards termen, a slight dark discoidal spot.

Hab. Haiti, San Francisco Mts. (*Busck*). *Exp.* 12 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

*736 *d*. **Afrida interdicta.** (Plate XXXIV. fig. 12.)

Afrida interdicta, Dyar, Insec. Inscit. Menstr. i. 3, p. 29 (1913).

♂. Head, thorax, and abdomen white tinged with olive-ochreous; antennæ blackish. Fore wing dirty white irrorated with olive-ochreous; the costal edge black towards base; a subbasal rather oblique blackish band from costa to submedian fold; a faint ill-defined dark medial band, defined by waved lines which are very indistinct except at costa; three black points on costa towards apex and a small round red spot beyond the cell; the terminal area with patches of dark scales. Hind wing white, the terminal area suffused with fuscous; a slight dark discoidal spot.

Hab. Cuba, Baracoa (*Schaus*). *Exp.* 12 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

736 *e*. **Afrida charientisma.** (Plate XXXIV. fig. 13.)

Afrida minuta, subsp. 1, Hmpsn. Cat. Lep. Phal. B.M. ii. p. 350 (1900).
Afrida charientisma, Dyar, Insec. Inscit. Menstr. i. 3, p. 30 (1913).

♂. Head and tegulæ ochreous white; antennæ with the shaft blackish; thorax white tinged with fuscous; tarsi blackish; abdomen blackish with white segmental lines. Fore wing ochreous white; some blackish on costal area before the dentate black

subbasal line from costa to vein 1; antemedial line black, waved; medial area suffused with fuscous and with a rather indistinct waved blackish medial line; postmedial line black, dentate, angled outwards at veins 4 and 1; two black points on costa towards apex and a small spot beyond the cell; a slight oblique dark streak from apex, diffused subterminal shade and some blackish points on termen. Hind wing white slightly tinged with fuscous, the termen suffused with fuscous; a blackish discoidal point. Underside of fore wing suffused with fuscous brown; hind wing with the costal area towards apex and termen suffused with black.

♀. Head brown; thorax except the tegulæ blackish; underside of hind wing without the black on costa and termen.

Hab. Cuba, Baracoa, Santiago (*Schaus*); Grenada, Balthazar (*H. H. Smith*), 1 ♂, 1 ♀. *Exp.* 14 millim.

736*f*. **Afrida pnixis.** (Plate XXXIV. fig. 14.)

Afrida pnixis, Dyar, Insec. Inscit. Menstr. i. 3, p. 30 (1913); id. Pr. U.S. Nat. Mus. xlvii. p. 166 (1914).

Head and tegulæ creamy white; thorax suffused with brown; antennæ blackish; abdomen fuscous brown with whitish segmental lines. Fore wing silvery white; a blackish antemedial patch on costa; a medial band of fuscous suffusion defined at sides by waved black lines; two black points on costa towards apex and a small spot beyond the cell; the terminal area suffused with fuscous running obliquely to apex. Hind wing white tinged with fuscous brown especially towards termen, a faint discoidal spot.

Hab. Panama; Br. Guiana, Demerara (*Rodway*), 1 ♀. *Exp.* 16 millim.

*736*g*. **Afrida gymnes.** (Plate XXXIV. fig. 15.)

Afrida gymnes, Dyar, Insec. Inscit. Menstr. i. 3, p. 31 (1913); id. Pr. U.S. Nat. Mus. xlvii. p. 166 (1914).

Head and thorax white; antennæ blackish; abdomen white tinged with brown. Fore wing white with some olive-yellow suffusion below the costa except towards apex; some brownish suffusion on costal area before the black subbasal line from costa to vein 1; two sinuous blackish medial lines with blackish suffusion between them on costa and inner area; three black points on costa towards apex and a point beyond the cell; the terminal area with some patches of dark scales and oblique streak from apex. Hind wing white tinged with fuscous.

Hab. Panama. *Exp.* 14 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

*736*h*. **Afrida cosmiogramma.** (Plate XXXIV. fig. 16.)

Afrida cosmiogramma, Dyar, Insec. Inscit. Menstr. i. 3, p. 31 (1913).

♂. Head, thorax, and abdomen white tinged with brown;

antennæ blackish. Fore wing white; the basal area tinged with brown; subbasal line blackish, from costa to submedian fold; a medial band of brown suffusion defined by black lines, the inner line angled outwards at vein 1, the outer at vein 4, the inner half of the band more strongly suffused with brown; the terminal area suffused with brown, connected at vein 4 with the medial band. Hind wing whitish, the terminal area suffused with grey; a slight grey discoidal spot.

Hab. Cuba, Baracoa (*Schaus*). *Exp.* 12 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

*736*i*. **Afrida ydatodes.** (Plate XXXIV. fig. 17.)

Afrida ydatodes, Dyar, Insec. Inscit. Menstr. i. 3, p. 31 (1913).

♀. Head, thorax and abdomen white suffused with brown; antennæ blackish. Fore wing white irrorated with brown; the basal costal area suffused with brown and defined by the black subbasal line from costa to submedian fold; medial area strongly suffused with brown defined by slightly darker lines, the inner line angled outwards at vein 1, the outer at vein 4; a black spot beyond the cell; the terminal area suffused with brown. Hind wing whitish, the terminal area suffused with grey; a small grey discoidal spot.

Hab. U.S.A., Florida (*Beutenmuller*). *Exp.* 12 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

*736*j*. **Afrida basipunctata.** (Plate XXXIV. fig. 18.)

Afrida basipunctata, Roths. Nov. Zool. xx. p. 195 (1913).

♂. Palpi, frons, and antennæ dark cupreous brown, the vertex of head and tegulæ white; thorax white mixed with dark cupreous brown; abdomen white tinged with cupreous brown; pectus, legs, and ventral surface of abdomen cupreous brown. Fore wing silvery white; the costa black-brown towards base with some cupreous brown irroration below it; subbasal black bars from costa and cell, the latter with a black spot beyond it in submedian interspace; antemedial line black, rather oblique, angled outwards in submedian fold; the median area suffused and irrorated with cupreous brown and with a faint oblique irregularly waved medial line; postmedial line black, inwardly oblique towards costa, then slightly excurved to discal fold, then oblique to vein 4, slightly angled inwards at submedian fold and excurved to inner margin, an oblique wedge-shaped black patch beyond it from costa enclosing a small white spot on costa and a black spot in discal fold; a black line arising from apex, oblique and sinuous to vein 6, then obliquely excurved to vein 4 near the postmedial line, then sinuous to tornus, the area beyond it suffused and irrorated with cupreous brown. Hind wing

silvery white with a slight brown terminal line from apex to vein 2; the cilia slightly brown at tips at apex. Underside of fore wing suffused with cupreous brown with some white marks on costa towards apex; hind wing with the costal area suffused with cupreous brown and with a blackish discoidal spot.

Hab. Peru, Carabaya, Agualani (*Ockenden*), type† ♂ in Coll. Rothschild. *Exp.* 24 millim.

*736 *k*. Afrida flavifera. (Plate XXXIV. fig. 19.)

Afrida flavifera, Dogn. Hét. Nouv. Am. Sud, vii. p. 13 (1914).

♂. Head, thorax, and abdomen white suffused with cupreous brown. Fore wing silvery white; a wedge-shaped patch edged with diffused black on base of costa and a subbasal black point below the cell with another beyond it; antemedial line black, excurved and slightly waved to above vein 1, then incurved; the medial area suffused with cupreous brown: a slight dark medial line, angled outwards below costa, then waved; some yellow beyond upper angle of cell; postmedial line black to discal fold then brown, angled inwards below costa and outwards at vein 7, excurved at middle and incurved at discal and submedian folds; an oblique wedge-shaped black subterminal patch on costal area with a curved white striga from costa and some yellow below it, then some small blackish spots; the terminal area with triangular patch of cupreous brown suffusion defined above by an oblique black streak from apex and extending at middle to near the postmedial line; a punctiform blackish terminal line and brown line through the cilia. Hind wing white; a slight brown discoidal spot and subterminal shade; a fine brown terminal line except towards tornus; the underside with the costal area suffused with brown except towards apex and with blackish ante- and postmedial patches.

Hab. Colombia, Cordoba, Monte Tolima, type † ♂ in Coll. Dognin. *Exp.* 22 millim.

737 *a*. Afrida melampages. (Plate XXXIV. fig. 20.)

Afrida melicerta, ab. 2, Hmpsn. Cat. Lep. Phal. B.M. ii. p. 350.
Afrida melampages, Dyar, Insec. Inscit. Menstr. i. 3, p. 32 (1913).

♂. Head and thorax silvery white, the patagia, pro- and metathorax with paired black patches; antennæ, except basal joint, and palpi blackish; frons tinged with fuscous; pectus and legs mostly black; abdomen white, banded with fuscous. Fore wing silvery white; a black patch on base of costa; an antemedial hoop-shaped black mark from discal fold to above inner margin; a conical black patch from costa to lower angle of cell where it is confluent with a triangular patch on terminal area extending from apex to tornus with irregular edges; a semielliptical black mark on costa towards apex. Hind wing white, the terminal area tinged with

fuscous; the underside with the costal area suffused with black, a black line from costa to lower angle of cell, and a subterminal spot in submedian interspace.

♀. Hind wing wholly suffused with fuscous.

Hab. Brazil, São Paulo (*D. Jones*), 2 ♂, 1 ♀; Bolivia. *Exp.* 18 millim.

*737 *b*. **Afrida oligoglotta.** (Plate XXXIV. fig. 21.)

Afrida oligoglotta, Dyar, Insec. Inscit. Menstr. i. 3, p. 32 (1913).

Head and thorax white; antennæ and palpi black; pectus and legs tinged with fuscous, the tarsi ringed with white; abdomen white with dorsal fuscous bands. Fore wing silvery white; a triangular purple-brown patch at base of costal area; a semicircular yellowish patch defined by black at middle of costal area; a medial black line from vein 2 to inner margin, angled inwards at vein 1; a small black hoop on costa towards apex; the terminal area purple-brown defined on inner side by an irregular black line, oblique from apex to discal fold beyond the cell, then nearly erect to below vein 2, then bent outwards; postmedial line represented by a black striga from vein 7 joining the brown area and a bar at inner margin. Hind wing whitish; a small brown discoidal spot and subterminal shade from costa to vein 2.

Hab. Brazil, Castro Paraña (*D. Jones*). *Exp.* 18 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

737 *c*. **Afrida viridifera**, n. sp. (Plate XXXIV. fig. 22.)

Afrida melicerta, Hmpsn. Cat. Lep. Phal. B.M. ii. p. 350 (part.), nec Druce.

♂. Head and thorax white; antennæ, frons, and palpi blackish; patagia, pro- and metathorax with paired black spots; pectus and legs suffused with blackish; abdomen white suffused with fuscous except at base where there is a depressed black crest. Fore wing silvery white; the costal edge black towards base with a pale yellow-green patch below it before the curved black subbasal line from costa to submedian fold; a black spot above vein 1 before the waved black antemedial line from just below the cell to inner margin; a conical pale yellow-green patch defined by black on costa above end of cell; a black spot below end of cell and line from submedian fold to inner margin, angled outwards at vein 1; two small black spots on postmedial part of costa with some pale yellow-green suffusion below them; the terminal area purplish brown irrorated with blackish and its inner edge defined by black, arising at apex, bent inwards below costa and at vein 6 to just beyond the cell, then erect and sinuous, a black postmedial striga defined on each side by white from its retracted part; traces of a blackish subterminal line. Hind wing white slightly tinged with

brown; the underside white, the costal half irrorated with fuscous, a blackish discoidal spot and some blackish subterminal marks.

Hab. Bolivia, Chaco (*Garlepp*), 1 ♂ type. *Exp.* 20 millim.

737 *d*. Afrida superciliosa. (Plate XXXIV. fig. 23.)

Afrida melicerta, ab. 1, Hmpsn. Cat. Lep. Phal. B.M. ii. p. 350 (1900).
Afrida superciliosa, Dyar, Insec. Inscit. Menstr. i. 3, p. 33 (1913).

♂. Head and thorax silvery white; palpi and antennæ brown; frons tinged with brown; tegulæ with some black at tips, the shoulders with black stripes, the patagia, meso- and metathorax with black bars; pectus and legs with black mixed; abdomen white dorsally banded with brown. Fore wing silvery white, some pale olive-green at middle of basal area and on medial, costal, and inner areas; some black suffusion on basal part of costal area defined on outer side by the black antemedial line, which is interrupted in the cell, then oblique, angled outwards in submedian fold and ending at vein 1; medial line black, slightly sinuous, angled outwards in the cell, then oblique and connected with the antemedial line by a streak in submedian fold; a semiannulate black mark on costa towards apex; a conical brown patch on terminal area from apex to tornus extending to the medial line, edged by sinuous black lines and its upper edge emitting a striga at middle. Hind wing white, the terminal half suffused with brown; the underside with the costal area suffused with brown, a brown discoidal spot, some black markings on apical area and a brown subterminal spot in submedian fold.

Hab. Brazil (*Sommer*), 1 ♂, São Paulo (*D. Jones*), 2 ♂. *Exp.* 16 millim.

737 *e*. Afrida coagulata. (Plate XXXIV. fig. 24.)

Afrida melicerta, Hmpsn. Cat. Lep. Phal. B.M. ii. p. 350 ♀ (nec ♂).
Afrida coagulata, Dyar, Insec. Inscit. Menstr. i. 3, p. 32 (1913); id. Pr. U.S. Nat. Mus. ined.

Head and thorax white; antennæ blackish; palpi, pectus, legs, and abdomen whitish suffused with fuscous. Fore wing silvery white; a subbasal black striga from costa with a cupreous tinge beyond it before the antemedial black line, which is angled outward below costa, excurved below the cell and ends at vein 1; a double medial black line from cell to inner margin, excurved below submedian fold and angled inwards at vein 1; a conical patch from costa to lower angle of cell, defined by black and filled in with blackish, rather constricted below the costa and squarely truncate below; two oblique black striæ from postmedial part of costa; postmedial line double, black, arising at vein 6, indistinct and diffused to vein 2, angled inwards just below submedian fold and outwards at vein 1; terminal area suffused with brown and irrorated with blackish, its inner edge running obliquely to apex and bent

inwards at vein 6; an indistinct blackish subterminal line, excurved below costa. Hind wing white, the terminal area suffused with fuscous brown; a slight dark postmedial line; in female more uniformly suffused with brown; the underside white with some fuscous irroration on costal and terminal areas, a small black discoidal spot and some subterminal fuscous brown patches.

Hab. Mexico, Jalapa (*Trujillo*), 2 ♀; Costa Rica, Candelaria Mts. (*Underwood*), 1 ♀, Godman-Salvin Coll. *Exp.* 16 millim.

*737*f*. **Afrida zoephila.** (Plate XXXIV. fig. 25.)

Afrida zoephila, Dyar, Insec. Inscit. Menstr. i. 3, p. 32 (1913); id. Pr. U.S. Nat. Mus. ined.

Head and thorax white; antennæ and palpi black; legs suffused with blackish, the tarsi ringed with white; abdomen white tinged with fuscous. Fore wing silvery white; some yellowish at base and the costal edge black towards base; antemedial line formed of small black spots conjoined in parts, curved; medial line represented by an incurved black mark below the cell with a point beyond it and sinuous line from vein 2 to inner margin; a conical brown patch defined by black and with black striga on it from costa at end of cell to discal fold, rounded below; postmedial line represented by small black spots beyond and below end of cell and a line from vein 2 to inner margin angled outwards at submedian fold and with some yellowish before it; two oblique black striæ from costa towards apex; the terminal area purple-brown irrorated with blackish and defined on inner side by an irregular black line, oblique from apex to vein 6, then nearly erect to inner margin; an indistinct blackish subterminal line on the brown area. Hind wing whitish suffused with brown.

Hab. Mexico. *Exp.* 18 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

*737 *g*. **Afrida amphithrepta.** (Plate XXXIV. fig. 26.)

Afrida amphithrepta, Dyar, Insec. Inscit. Menstr. i. 3, p. 32 (1913).

♀. Head, thorax, and abdomen white tinged with fuscous; antennæ and palpi black; legs suffused with fuscous, the tarsi ringed with white. Fore wing silvery white; the basal and medial parts of costal area suffused with purple-brown, the base slightly tinged with yellowish; antemedial line black, angled outwards at median nervure, then obliquely curved; medial line black, bent outwards below costa and inwards at median nervure to near the antemedial line, bent outwards again at submedian fold; postmedial line black, slightly sinuous, bent outwards and interrupted at vein 1; an oblique black striga followed by two points on costa towards apex; terminal area purple-brown irrorated with blackish

and defined on inner side by an irregular black line, oblique and sinuous from apex to the postmedial line beyond lower angle of cell and bent outwards below vein 2. Hind wing white tinged with brown, the terminal area suffused with brown; a dark discoidal point.

Hab. Argentina, Salta Prov., Metan (*Dinelli*). *Exp.* 20 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

*737 *h*. **Afrida melenita.** (Plate XXXIV. fig. 27.)

Afrida melenita, Dogn. Hét. Nouv. Am. Sud, ii. p. 13 (1911).

♂. Head and thorax glossy creamy white; palpi and a patch on frons blackish; antennæ brown, the shaft ringed with white; pectus and legs suffused with brown; abdomen white suffused with brown except at base of dorsum. Fore wing glossy creamy white; a black streak on base of costa; a rather triangular fuscous brown patch on costa just beyond middle, defined on inner side by an oblique black line; a black mark on costa towards apex with a white point on it; the terminal area with a triangular fuscous brown patch from apex to tornus, its edges irregular and with slight black marks on them; some white marks on termen except towards apex; cilia brown with some white above tornus. Hind wing white; a slight brown discoidal spot; the terminal area suffused with brown; cilia white, tinged with brown in parts. Underside of fore wing red-brown; hind wing white, the costal area red-brown, a brown discoidal spot, the terminal area with some brown spots.

Hab. Fr. Guiana, St. Laurent Maroni, type † ♂ in Coll. Dognin. *Exp.* 14 millim.

*737 *i*. **Afrida zolda.** (Plate XXXIV. fig. 28.)

Afrida zolda, Dyar, Insec. Inscit. Menstr. i. 3, p. 33 (1913); id. Pr. U.S. Nat. Mus. ined.

Head, thorax, and abdomen white tinged with fuscous; antennæ and palpi blackish; legs suffused with fuscous, the tarsi ringed with white. Fore wing pure white; the costal edge black towards base; antemedial line black, angled outwards in and below the cell and inwards above vein 1; a blackish spot at middle of costa and two points in the cell; postmedial line black, angled outwards below costa, then rather oblique and sinuous; a black point on postmedial part of costa with an inwardly oblique striga beyond it; terminal area purplish brown irrorated with blackish and defined on inner side by an irregular black line, oblique from apex to the postmedial line beyond lower angle of cell and bent outwards below submedian fold; traces of a blackish subterminal line on the brown area. Hind wing white tinged with brown, the terminal area suffused with brown.

Hab. Mexico; Costa Rica. *Exp.* 18 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

*737 *j*. Afrida polyglotta. (Plate XXXIV. fig. 29.)

Afrida polyglotta, Schaus, ined.

Head, thorax, and abdomen white, the last banded with fuscous. Fore wing silvery white, the base tinged with ochreous except at costa; an antemedial black spot on costa and oblique line from cell to inner margin, a short black streak beyond it in cell and waved medial line from cell to inner margin; a black discoidal bar and two oblique bars from middle of costa with some ochreous between them; a hoop-shaped mark on costa towards apex, the postmedial line arising below it, incurved to submedian fold, then excurved; the terminal area purplish brown except at apex, defined on inner side by a black line, bent inwards with an upward curve at discal fold, where there is a black point and some ochreous above it, then incurved to tornus. Hind wing fuscous, the cilia white.

Hab. Costa Rica (*Schaus*). *Exp.* 18 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

737 *k*. Afrida claricosta. (Plate XXXIV. fig. 30.)

Afrida claricosta, Dyar, Insec. Inscit. Menstr. i. 3, p. 33 (1913).

Head and thorax pure white, a few black scales on patagia and in front of metathorax; antennæ and palpi blackish; pectus and legs suffused with brown, the tarsi ringed with white; abdomen white tinged with brown. Fore wing pure white; the costa streaked with black towarde base; antemedial line formed of black scales and much interrupted, excurved to submedian fold, then incurved; medial line formed of black scales and much interrupted, angled outwards below vein 7, then sinuous; an oblique postmedial black striga from costa and spot at vein 5; terminal area purplish brown, its inner edge defined by black, oblique and irregularly sinuous from apex to the medial line at lower angle of cell, then nearly erect to submedian fold, then slightly bent outwards; subterminal line formed of double black marks, excurved below costa and filled in with whitish marks on the brown area, slightly angled inwards at discal fold and vein 2. Hind wing white slightly tinged with brown, the terminal area more suffused with brown; the underside with the costal area suffused with brown, a brown discoidal spot and some subterminal marks.

Hab. Fr. Guiana, St. Jean Maroni; S. Brazil, Tijuca (*Wagner*), 1 ♀. *Exp.* 18 millim.

738. Afrida ciliata.

The type is a female, the antennæ of male are pectinate.
COLOMBIA, Cordoba, Monte Tolima in Coll. Dognin.

738 *a*. Afrida phasma. (Plate XXXIV. fig. 31.)

Afrida phasma, Dyar, Insec. Inscit. Menstr. i. 3, p. 30 (1913).

♂. Head, thorax, and abdomen white; antennæ, palpi, pectus, legs, and ventral surface of abdomen tinged with brown. Fore wing silvery white with faint diffused olive-yellow shades on ante- and postmedial areas; the costa streaked with black towards base; an ochreous tinge and some black irroration before the slight sinuous black subbasal line from costa to submedian fold; antemedial line blackish, waved, the medial area irrorated with dark brown, rather narrow and with an indistinct waved dark medial line on it; postmedial line blackish, oblique to vein 6, incurved at discal fold, angled outwards at vein 4, then oblique and sinuous, a minute black spot beyond it at discal fold and some dark points on costa; some dark scales on termen except towards tornus forming more or less distinct points towards apex; cilia with blackish scales mixed. Hind wing white with some brown scales at end of cell and traces of a postmedial line excurved to vein 4, then oblique and sinuous; the termen faintly tinged with brown; the underside with the costal area irrorated with brown, a small blackish discoidal spot.

Hab. BRAZIL, Castro Paraña, 1 ♂. *Exp.* 16–18 millim.

*738 *b*. Afrida sceletozona. (Plate XXXIV. fig. 32.)

Afrida sceletozona, Schaus, ined.

Head, thorax, and abdomen white. Fore wing white; traces of a sinuous brownish antemedial line; medial line fine, blackish, waved; medial area tinged with yellowish and with a slight discoidal brown striga; postmedial line fine, blackish, angled outwards at vein 6, excurved at vein 4, then incurved; a subterminal black point at discal fold; a fine dark terminal line and slight mark on termen at vein 6. Hind wing white with small dark discoidal spot and curved postmedial line; a fine dark terminal line.

Hab. COSTA RICA (*Schaus*). *Exp.* 16 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

Genus EUZEUGAPTERYX.

Type.
Euzeugapteryx, Dyar, Pr. U.S. Nat. Mus. xxix. p. 175 (1905) ... *speciosa*.

Proboscis aborted; palpi slender, short, hardly reaching beyond the frons; antennæ of male ciliated; tibiæ with the spurs moderate. Fore wing with vein 2 from before middle of cell; 3 and 5 from near angle; 6 from below upper

angle; 7, 8 stalked, 9 absent; 10, 11 stalked; male with a large costal fold on underside, fringed with hair and extending to well beyond middle and a glandular swelling below the cell before middle, convoluted on underside. Hind wing with the cell very short; veins 3, 4 coincident; 5 absent; 6, 7 coincident; a fringe of rough upturned scales on underside above and below costal nervure, the termen strongly excised from apex to vein 4.

In key differs from *Hypermæpha* in the fore wing having veins 10, 11 stalked, 11 not anastomosing with 12; hind wing with veins 3, 4 coincident.

*738 *c*. Euzeugapteryx speciosa.

Euzeugapteryx speciosa, Schaus, Pr. U.S. Nat. Mus. xxix. p. 205 (1905).

♂. Head and thorax fuscous brown; abdomen fuscous, the anal tuft ochreous, the ventral surface grey. Fore wing pale thickly irrorated with black-brown scales, the area below costa darker.

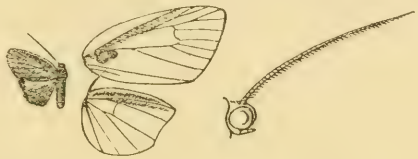

Fig. 205.—*Euzeugapteryx speciosa*, ♂. ½.

Hind wing fuscous, the costal area pale except at apex which is black. Underside of fore wing with the edge of costal fold and glandular swelling ochreous. Hind wing with the fringe below costa ochreous, the costa and apex black.

Hab. Fr. Guiana, St. Jean Maroni, type † ♂ in U.S Nat. Mus. *Exp.* 16 millim Type much rubbed.

739 *a*. Hypermæpha maroniensis. (Plate XXXIV. fig. 33.)

Hypermæpha maroniensis, Schaus, Pr. U.S. Nat. Mus. xxix. p. 199 (1905).

Talara roseata, Roths. Nov. Zool. xx. p. 201 (1913).

Head and thorax ochreous white; fore legs brownish; abdomen whitish tinged with scarlet. Fore wing ochreous, the area below submedian fold whitish; some brown irroration from base below the cell to termen; a somewhat lunulate brown discoidal spot; the termen with brown points from apex to the irrorated fascia. Hind wing crimson. Underside of both wings crimson.

Hab. Fr. Guiana, St. Jean Maroni (*Schaus*), 1 ♂; Peru, R. Colorado (*Watkins*), type † ♀ *roseata* in Coll. Rothschild. *Exp.* 16 millim. Type † ♂ in U.S. Nat. Mus.

*740 *a*. Chrysochlorosia magnifica. (Plate XXXIV. fig. 34.)

Chrysochlorosia magnifica, Schaus, A. M. N. H. (8) vii. p. 363 (1911).

♂. Head, thorax, and abdomen brilliant metallic blue-green

antennæ white above towards tips. Fore wing brilliant metallic green, the costa towards apex and the termen black suffused with brilliant metallic blue-green. Hind wing fuscous slightly suffused with blue-green, the cilia brilliant metallic blue-green; the underside brilliant metallic green.

Hab. Costa Rica, Sixola R. (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 24 millim.

*740 *b*. **Chrysochlorosia superba.** (Plate XXXIV. fig. 35.)

Chrysochlorosia superba, Druce, A. M. N. H. (8) vi. p. 176 (1910).

♀. Head and thorax black suffused with brilliant metallic green; antennæ black, white towards tips; abdomen black suffused with metallic copper and green. Fore wing metallic copper edged with metallic green to well beyond middle, the terminal area broadly black, the outer edge of the green area rather irregular. Hind wing black-brown. Underside of fore wing suffused with metallic green except inner and terminal areas which are black-brown; hind wing metallic green.

Hab. Colombia, Tado River, San Juan (*Palmer*), type † ♀ in Coll. Joicey. *Exp.* 28 millim.

Page 352. Genus **ODOZANA**, insert:—

	Type.
Saozana, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 172 (1914)	*leucota*.

*742 *a*. **Odozana unica.**

Odozana unica, Schaus, Pr. U.S. Nat. Mus. xxix. p. 199 (1905).

Hind tibiæ of male not fringed with hair; hind wing with fringe of long downturned hair in cell on underside; the inner area and area beyond the cell clothed with rough hair.

♂. Head and thorax black-brown; abdomen crimson, the

Fig. 206.—*Odozana unica*, ♂. ½.

ventral surface black. Fore wing dull greyish brown, the inner half suffused with fuscous. Hind wing crimson, the apical area from costa before middle to termen at vein 2 black-brown, its inner edge sinuous.

Hab. Mexico, Cordoba, type † ♂ in U.S. Nat. Mus. *Exp.* 20 millim.

743 *a*. Odozana leucota.

Odozana leucota, Hmpsn. A. M. N. H. (7) viii. p. 184 (1901).

Fore wing of male with glandular swelling below middle of cell, the underside with the basal half of costa fringed with hair, the inner margin with fringe of long black hair at middle, a scale-tooth at tornus; hind wing with the costal area strongly lobed to beyond middle, the apical part strongly excised, the costal area clothed with rough upturned hair on underside and with small glandular swelling on subcostal nervure beyond origin of vein 8.

White; head, thorax, and abdomen slightly tinged with fulvous. Fore wing with the greater part of wing tinged with fulvous; an

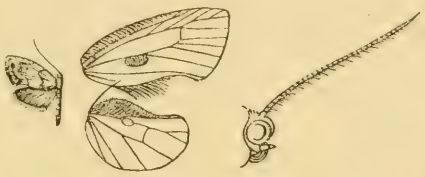

Fig. 207.—*Odozana leucota*, ♂. ½.

indistinct dark antemedial line bent inwards to costa and angled outwards on the veins; a black point at lower angle of cell; the postmedial line strongly bent outwards beyond the cell and angled on veins 6 and 4, with diffused conjoined fulvous spots beyond it between vein 6 and inner margin; the termen and cilia with fuscous spots. Hind wing fuscous, the cilia white except towards tornus.

Hab. Costa Rica, Sixola R. (*Schaus*), ♂ in U.S. Nat. Mus.; Panama, Cana Mines (*Tylecote*), 1 ♀ type. *Exp.* 18 millim.

743 *b*. Odozana sixola. (Plate XXXIV. fig. 36.)

Odozana sixola, Schaus, A. M. N. H. (8) vii. p. 363 (1911).

♂. Head and tegulæ black-brown; thorax crimson; pectus and legs black-brown; abdomen crimson, the ventral surface black-brown except at extremity. Fore wing fuscous brown. Hind wing crimson, the terminal area fuscous brown, broadly at costa and narrowing to a point at vein 1, its inner edge irregular; the underside with the costal area brown to base.

Hab. Costa Rica, Sixola R. (*Schaus*), 2 ♂. *Exp.* 18 millim.

*743 *c*. Odozana roseiceps. (Plate XXXV. fig. 1.)

Odozana roseiceps, Roths. Nov. Zool. xx. p. 196 (1913).

♂. Palpi pinkish, brown at tips; frons and basal joint of antennæ pink; antennæ and a spot between their bases dark

brown, the vertex of head crimson; tegulæ and patagia crimson, the former black at tips; thorax dark red-brown; pectus and legs red-brown with some crimson below the wings; abdomen crimson, the ventral surface red-brown. Fore wing dark red-brown. Hind wing crimson, the terminal area red-brown widening to costa and with its inner edge rather irregular; the underside with the costal area red-brown.

Hab. Peru, Carabaya, St. Domingo (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

743 *d.* **Odozana decepta.** (Plate XXXV. fig. 2.)

Odozana decepta, Schaus, A. M. N. H. (8) vii. p. 364 (1911).

♂. Head and thorax black-brown; abdomen crimson with the basal segments and ventral surface brown. Fore wing fuscous brown. Hind wing fuscous brown with the cilia of inner margin crimson.

Hab. Costa Rica, Sixola R. (*Schaus*), 1 ♂. *Exp.* 20 millim.

*745 *a.* **Odozana coccinicepS.** (Plate XXXV. fig. 3.)

Odozana coccinicepS, D. Jones, Trans. Ent. Soc. 1908, p. 145.

♀. Head crimson, the antennæ black; thorax black-brown, the tegulæ in front, shoulders, and front of pectus crimson; abdomen black-brown. Fore wing uniform black-brown. Hind wing crimson, the costa and inner margin black-brown; a terminal black-brown band expanding widely on costal area and below submedian fold.

Hab. Brazil, Castro Paraña, type † in Coll. D. Jones. *Exp.* 22 millim.

*746 *a.* **Odozana patagiata.** (Plate XXXV. fig. 4.)

Odozana patagiata, Dogn. Ann. Soc. Ent. Belg. liii. p. 218 (1909).

♀. Head, thorax, and abdomen brown with a metallic gloss; patagia scarlet; pectus and femora with some yellowish; abdomen with lateral crimson fasciæ at base. Fore wing brown with a golden metallic gloss. Hind wing scarlet with the costa and termen narrowly black.

Hab. Bolivia, Corvico, type † ♀ in Coll. Dognin. *Exp.* 20 millim.

*746 *b.* **Odozana inconspicua.** (Plate XXXV. fig. 5.)

Odozana inconspicua, Schaus, A. M. N. H. (8) vii. p. 363 (1911).

♀. Head dark brown; thorax orange-red, the tegulæ brown at base; pectus and legs brown; abdomen dark brown, orange-red at base. Wings uniform brown.

Hab. Costa Rica, Sixola R. (*Schaus*), type † ♀ in U.S. Nat. Mus. *Exp.* 16 millim.

751 *a*. **Prepiella phœnicolopha**, n. sp. (Plate XXXV. fig. 6.)

♂. Head and thorax dark brown with a bluish gloss; pectus, legs, and abdomen paler brown, the last with the extremity of 3rd segment, the 4th segment, and lateral tufts pale crimson. Fore wing dark brown. Hind wing crimson, the costal area and termen to vein 4 dark brown.

Hab. Ecuador, Quevedo, 1 ♂ type. *Exp.* 14 millim.

751 *b*. **Prepiella procridia.** (Plate XXXV. fig. 7.)

Prepiella procridia, Hmpsn. A. M. N. H. (7) xv. p. 435 (1905).

♂. Head and thorax fuscous shot with metallic green; abdomen fuscous, the tufts on 3rd segment fulvous, the ventral surface shot with metallic green. Fore wing fuscous, the costal half and termen suffused with golden metallic green. Hind wing fuscous brown, the hair on tornal lobe fulvous.

Hab. Paraguay, Sapucay (*Foster*), 1 ♂ type. *Exp.* 20 millim.

*753 *a*. **Prepiella convergens.** (Plate XXXV. fig. 8.)

Prepiella convergens, Schaus, Pr. U.S. Nat. Mus. xxix. p. 199 (1905).

♂. Head and thorax yellowish white; abdomen yellow tinged with crimson. Fore wing yellow; the basal area streaked with black from costa to submedian fold; a strong medial black line, angled outwards below costa to near the postmedial line, then oblique and slightly sinuous; a crimson spot beyond the cell, oblique streak below end of cell and some suffusion on inner margin; the postmedial line strong, black, very oblique, slightly excurved from below costa to tornus, the veins beyond it with prominent black streaks not quite reaching termen on which there is a black line. Hind wing yellow with apical black patch narrowing to a point at vein 2.

Hab. Fr. Guiana, St. Jean Maroni, type † ♂ in U.S. Nat. Mus. *Exp.* 14 millim.

754 *a*. **Prepiella radicans.** (Plate XXXV. fig. 9.)

Prepiella radicans, Hmpsn. A. M. N. H. (7) xv. p. 435 (1905).
Prepiella strigillata, Roths. Nov. Zool. xx. p. 198 (1913).

Head and thorax yellow; antennæ black except at base; fore and mid tibiæ with black bands; abdomen yellow slightly tinged with crimson. Fore wing bright yellow, with slight crimson streaks in discal and submedian folds; the terminal area tinged with crimson; a black spot at base of costa followed by a black streak below costa; short black streaks on the veins before the antemedial line which is oblique from costa to submedian fold, then incurved; postmedial line irregular, oblique from costa to subterminal line at vein 4 and emitting short streaks on the veins,

then finer, retracted along vein 3 to below end of cell near antemedial line and giving off a fine streak on vein 2, then excurved below submedian fold; a curved subterminal line; cilia fuscous. Hind wing yellow tinged with crimson.

Hab. Br. Guiana, Bartica (*W. J. Kaye*), 1 ♂ type; Surinam, Maroewym Valley, Aroewarwar Creek (*Klages*); Peru, Carabaya, R. Huacamayo, La Union (*Ockenden*), type † ♂ *strigillata* in Coll. Rothschild. *Exp.* 16 millim.

*759 *a*. **Lamprostola thermeola.** (Plate XXXV. fig. 10.)

Lamprostola thermeola, Dogn. Mém. Soc. Ent. Belg. xix. p. 126 (1912).

♀. Head, thorax, and abdomen black-brown suffused with metallic green, the last with slight lateral crimson streaks. Fore wing deep purple-brown, the basal half with a slight leaden gloss, the terminal half with a golden gloss. Hind wing deep crimson; the inner margin and termen black-brown, the latter expanding widely on apical area; the underside with the costal area blackish brown.

Hab. Colombia (*Fassl*), type † ♀ in Coll. Dognin. *Exp.* 20 millim.

*760 *a*. **Lamprostola unifascia.** (Plate XXXV. fig. 11.)

Illice unifascia, Roths. Nov. Zool. xx. p. 225 (1913).

♂. Head black-brown glossed with silvery grey; tegulæ yellow tinged with scarlet; thorax dark brown; pectus yellow (fore and mid legs wanting); the hind legs yellow with blackish bands at base and extremity of tibiæ; abdomen crimson, the ventral surface banded black and yellow except at extremity. Fore wing dark brown with slight greyish pencilling; a yellow band just before middle, arising just below costa towards which it is narrow, then broad; cilia white at tips. Hind wing crimson, the costa towards apex, the cilia and termen narrowly to vein 2, black-brown. Underside of fore wing dark brown, the basal half crimson except at costa with oblique outer edge.

Hab. Colombia, Muzo R., Cantinero (*Fassl*), type † ♂ in Coll. Rothschild. *Exp.* 16 millim.

*761 *a*. **Lamprostola endochrysis.** (Plate XXXV. fig. 12.)

Lamprostola endochrysis, Dogn. Ann. Soc. Ent. Belg. liii. p. 218 (1909).

♂. Head and thorax black with a leaden grey gloss; abdomen black-brown with lateral orange patches and tufts of hair towards extremity, the genital tufts whitish. Fore wing black suffused with leaden grey leaving some black in cell, a streak along vein 11, a wedge-shaped patch from end of cell to termen and streaks along median nervure and veins 3, 2, 1. Hind wing black-brown with

the inner area orange-yellow from cell to inner margin; the underside with the yellow extending into and beyond the cell.

Hab. Colombia, type † ♂ in Coll. Dognin. *Exp.* 22 millim.

*764 *a*. Callisthenia costilobata.

Callisthenia costilobata, Roths. Nov. Zool. xx. p. 198 (1913).

Fore wing of male with the costa excised before middle and lobed at middle, vein 12 sinuous and 10 and 11 becoming coincident with it, the underside with the area just beyond the cell and from below end of cell to inner margin clothed with rough androconia; hind wing with fold on inner area and the area below the cell clothed with rough androconia on underside.

♂. Head pale yellow; thorax pale yellow mixed with brown; abdomen red-brown, the pectus, legs, and ventral surface of abdomen pale yellow. Fore wing pale yellow; the basal half with

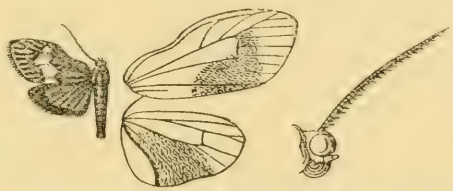

Fig. 208.—*Callisthenia costilobata*, ♂. ⅔.

diffused dark brown streaks on the costa and veins; a waved dark brown medial line, the area beyond it yellow with diffused crimson spots on it to the dark brown postmedial line, which is oblique to the discal fold in which it is acutely angled outwards, then erect to inner margin, the veins beyond it with dark brown streaks and the costa and termen dark brown. Hind wing deep crimson, the inner area dark brown and the termen dark brown narrowing to tornus. Underside of fore wing crimson, the costal area broadly brown interrupted by a crimson band beyond middle, the terminal area brown with whitish spots in the interspaces; hind wing with the basal half of costal area brown.

Hab. Peru, R. Colorado (*Watkins*), type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

*765 *a*. Callisthenia angusta.

Callisthenia angusta, Schaus, Pr. U.S. Nat. Mus. xxix. p. 199 (1905).

Hind wing of male with fold on inner area on underside containing a fringe of hair; fore wing with fringe of hair on inner margin beyond middle.

♂. Head and thorax blackish, a yellow bar between antennæ and streaks on sides of head; tegulæ yellow; patagia at extremities

yellow tinged with crimson; legs yellowish and black, the tarsi yellow except at extremities; abdomen crimson, the ventral surface yellow banded with black. Fore wing yellow; the basal half with strong black streaks on costa and veins; a medial yellow band defined by black, the crimson discoidal spot on it, bent inwards below median

Fig. 209.—*Callisthenia angusta*, ♂. ½.

nervure and ending in a point above inner margin; the veins of terminal area strongly streaked with black. Hind wing crimson, the apical area black ending in a point at vein 2, its inner edge sinuous.

Hab. Fr. Guiana, St. Jean Maroni, type † ♂ in U.S. Nat. Mus. *Exp.* 14 millim.

Page 363. Under **ILLICE** insert:—

	Type.
Paraprepia, Dyar, Insec. Inscit. Menstr. i. 6, p. 75 (1913)	*ruficollis.*
Parillice, Dyar, Insec. Inscit. Menstr. i. 6, p. 75 (1913)	*ruficollis.*

*767 *a*. Illice mediofasciata. (Plate XXXV. fig. 13.)

Illice mediofasciata, Roths. Nov. Zool. xx. p. 199 (1913).

♀. Head and thorax reddish brown with a cupreous gloss, the neck with pale crimson ring; palpi, pectus, and legs pale crimson, the fore and mid tibiæ and tarsi brown; abdomen deep crimson, the ventral surface pale. Fore wing reddish brown with a cupreous gloss; a yellow band just beyond middle, somewhat constricted at middle. Hind wing crimson, with a narrow dark brown terminal band ending in a point at tornus. Underside of fore wing with the inner area yellow to the postmedial band.

Hab. Bolivia, Buenavista (*Steinbach*), type † ♀ in Coll. Rothschild. *Exp.* 18 millim.

*767 *b*. Illice trimaculata.

Illice trimaculata, D. Jones, Trans. Ent. Soc. 1914, p. 8, pl. i. f. 21.

♂. Head red-brown and ochreous, the antennæ dark brown; tegulæ orange, the patagia pale yellow, the thorax cupreous brown; pectus and legs orange-yellow, the fore legs red-brown in front; abdomen pale crimson, the ventral surface orange-yellow. Fore

wing cupreous red-brown; a pale yellow fascia on basal half of inner margin; small postmedial yellowish spots on costa and above inner margin. Hind wing pale crimson, the submedian fold yellowish, the termen cupreous brown towards apex. Underside of fore wing crimson, the basal half of costa cupreous brown, a cupreous brown terminal band with curved inner edge, broad at costa and narrowing to tornus.

Hab. Brazil, Castro Paraña (*D. Jones*), type † ♂ in Coll. D. Jones. *Exp.* 16 millim.

768 *a*. Illice endoxantha.

Illice endoxantha, Hmpsn. A. M. N. H. (7) xi. p. 347 (1903).

Hind wing of male with the tornus produced to a very long lobe with fringes of hair and scales on upper and undersides, the termen very strongly excised before it.

♂. Head, tegulæ, and patches on patagia yellowish white; a slight band above frons, antennæ, and thorax purplish brown; legs yellow, the fore legs purple-brown with the 1st tarsal joint pale;

Fig. 210.—*Illice endoxantha*, ♂. ½.

abdomen orange. Fore wing purplish brown with broad yellowish fascia on basal half of inner margin, a somewhat conical postmedial patch on costa and semicircular patch on inner margin. Hind wing yellow with the inner area orange; a small brown apical patch; veins 6, 7 stalked.

♀. Hind wing with the inner area yellow.

Hab. Brazil, Petropolis (*Doer*), 1 ♂, 1 ♀ type. *Exp.* 24 millim.

769 *a*. Illice triplaga. (Plate XXXV. fig. 14.)

Illice triplaga, Hmpsn. A. M. N. H. (7) xv. p. 436 (1905).

♂. Head yellow, the 3rd joint of palpi, frons, and antennæ except basal joint black; tegulæ and patagia yellow, thorax fuscous; pectus yellow; legs fuscous and yellow; abdomen crimson. Fore wing fuscous; a yellow patch on basal half of inner margin; a postmedial conical patch from costa to discal fold

and another from vein 2 to inner margin becoming crimson at margin. Hind wing crimson with fuscous terminal band from apex narrowing to a point at vein 2. Underside of fore wing with the patches crimson and confluent.

Hab. Paraguay (*Foster*), 1 ♂ type. *Exp.* 20 millim.

770. **Illice unifascia**, insert:—

Var. *kentuckiensis*, Dyar, Proc. Ent. Soc. Wash. vi. p. 198 (1904).

Vertex of head, tegulæ, and patagia dark yellow; thorax grey; abdomen pink. Fore wing dark leaden grey with a broad transverse yellow band occupying one-third of wing, broadly joined at base to inner margin. Hind wing pink with narrow terminal band.

Kentucky.

Var. *perrosea*, Dyar, Proc. Ent. Soc. Wash. vi. p. 198 (1904).

Vertex of head, tegulæ, thorax except centre of disk, and abdomen pink. Fore wing slate-grey with rather narrow pink band parallel to termen, joined to base along inner margin or rarely obsolete. Hind wing pink with rather broad terminal grey band.

California, Los Angeles.

Var. *barnesii*, Dyar, Proc. Ent. Soc. Wash. vi. p. 198 (1904).

Head, tegulæ, and thorax grey except inner edge of patagia and sometimes the base of tegulæ which are yellow. Fore wing with the band yellow, narrow, usually interrupted, upright, narrowly joined to base along inner margin. Hind wing pink, pale orange, or yellow with the terminal band broad at apex.

Colorado, Glenwood Springs.

770 *a*. **Illice angelus**. (Plate XXXV. fig. 15.)

Illice angelus, Dyar, Proc. Ent. Soc. Wash. vi. p. 198 (1904).

Head, tegulæ, and thorax yellow; abdomen pink. Fore wing elongate, pale slate-grey, shining; band yellow, slightly oblique, even, broad, joined to base along inner margin. Hind wing pink with grey terminal band towards apex.

Hab. U.S.A., Arizona, Bright Angel, Catalina Mts. (*Oslar*), 1 ♂, 1 ♀. *Exp.* 23–28 millim.

771 *a*. **Illice abala**. (Plate XXXV. fig. 16.)

Illice abala, Schaus, Pr. U.S. Nat. Mus. xxxix. p. 200 (1905).

♂. Head and thorax fuscous; tegulæ yellowish; tibiæ and tarsi mostly pale; abdomen crimson. Fore wing fuscous brown with yellow patch at base of inner area and slightly curved yellow post-

medial band. Hind wing crimson with fuscous apical patch ending in a point at vein 2, its inner edge sinuous. Underside of fore wing with the postmedial band tinged with crimson.

♀. Hind wing with the fuscous terminal band extending to tornus.

Hab. Fr. Guiana, St. Jean Maroni (*Schaus*), 1 ♀, type † ♂ in U.S. Nat. Mus. *Exp.* 16 millim.

*771 *b*. Illice discistriga. (Plate XXXV. fig. 17.)

Illice discistriga, Dogn. Mém. Soc. Ent. Belg. xix. p. 126 (1912).

♀. Head and thorax dark brown; yellow streaks behind antennæ, the tegulæ and patagia with yellow stripes; coxæ, the base of mid femora, the hind femora and base of tibiæ, and the 1st joint of tarsi yellow; abdomen crimson, the extremity and ventral surface black-brown. Fore wing dark brown; a fulvous yellow streak on basal half of inner margin; a somewhat curved yellow medial band; a wedge-shaped yellow mark in extremity of discal fold. Hind wing crimson, the terminal half black-brown narrowing somewhat towards inner margin. Underside of fore wing with the medial band reduced to a patch on costal area; hind wing with the basal half yellow, tinged with scarlet on inner area.

Hab. Fr. Guiana, St. Laurent Maroni (*Le Moult*), type † ♀ in Coll. Dognin. *Exp.* 20 millim.

773 *a*. Illice subrubra. (Plate XXXV. fig. 18.)

Illice subrubra, Schaus, Pr. U.S. Nat. Mus. xxix. p. 200 (1905).

♂. Head and thorax black-brown; palpi, back of head, and tegulæ crimson; abdomen crimson. Fore wing dull olive-brown. Hind wing crimson with fuscous apical patch ending in a point at vein 2. Underside of fore wing with slight crimson streak below costa, becoming costal towards apex.

Hab. Fr. Guiana, Cayenne (*Schaus*), 1 ♂, type † ♂ in U.S. Nat. Mus. *Exp.* 16 millim.

*773 *b*. Illice longistriga. (Plate XXXV. fig. 19.)

Odozana longistriga, Roths. Nov. Zool. xx. p. 196 (1913).

♂. Head and thorax white tinged with brown; palpi at tips and antennæ black-brown; tegulæ pale crimson; pectus and fore and mid legs white suffused with brown, the hind legs white; abdomen pale crimson. Fore wing white tinged with reddish brown, leaving a diffused fascia in submedian fold and the inner margin narrowly pure white. Hind wing pale crimson, the termen and cilia black-

brown from apex to vein 2. Underside of fore wing black-brown, the area below the cell pale crimson to just before termen.

Hab. Peru, Carabaya, R. Huaeamayo (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 14 millim.

773 *c.* Illice biota. (Plate XXXV. fig. 20.)

Illice biota, Dyar, Zoologica, N.Y. i. p. 127, f. 41. no. 5 (1910).

♂. Head and thorax grey, the edges of vertex and base of antennæ yellowish; tegulæ yellow, crimson in front; patagia yellowish dorsally; hind legs whitish; abdomen crimson. Fore wing slate-grey with a broad yellowish white fascia in submedian interspace from base to termen. Hind wing crimson, the apical area fuscous to vein 2; the cilia fuscous to near tornus. Underside of fore wing with the fascia crimson and not reaching the termen.

♀. Back of head and tegulæ crimson; fore wing with the fascia tinged with crimson.

Hab. Br. Guiana, Demerara (*Rodway*), 1 ♀, Hoorie (*Beebe*). *Exp.* 18 millim. Figured from drawing from type in U.S. Nat. Mus.

774 *a.* Illice subrufa. (Plate XXXV. fig. 21.)

Ozodania subrufa, Barnes & McD. Contr. Nat. Hist. Lep. N. Am. ii. (1) pl. ii. f. 18 & (3) p. 102, pl. iii. ff. 4, 5 (1913).

♀. Head, tegulæ, and patagia pale ochreous yellow, the last with black-brown outer edge, the rest of thorax grey-brown; antennæ and fore legs black-brown; abdomen pale crimson. Fore wing yellow thickly irrorated with brown, the inner area more suffused with brown; an elongate yellowish white patch on basal half of inner margin, a small triangular patch from costa beyond middle with slight yellowish points between it and a triangular patch extending from lower angle of cell to inner margin. Hind wing pale crimson with small fuscous brown apical patch. Underside of fore wing pale crimson, the costa and cilia brown, the termen yellowish.

Hab. U.S.A., Texas, San Benito, 1 ♀, co-type. *Exp.* 14 millim.

774 *b.* Illice pygmæa. (Plate XXXV. fig. 22.)

Illice pygmæa, Schaus, Pr. U.S. Nat. Mus. xxix. p. 200 (1905).

♂. Head and thorax fuscous, the vertex of head, tegulæ, and patagia whitish; legs whitish and fuscous; abdomen crimson. Fore wing greyish fuscous with broad whitish fascia on basal half of inner margin and white postmedial band rather constricted at middle. Hind wing yellow slightly tinged with crimson; an

apical fuscous patch ending in a point at vein 2. Underside with the costal half of postmedial band of fore wing and costal area of hind wing tinged with crimson.

Hab. Fr. Guiana, St. Jean Maroni (*Schaus*), 1 ♂, type † ♂ in U.S. Nat. Mus. *Exp.* 12 millim.

776. Illice subjecta.

Egg. Dyar, Pr. U.S. Nat. Mus. xxiii. p. 266 (1900).

Rounded, conoidal, base flat, polyhedral, the cell areas flattened, rounded hexagonal, the surface slightly shagreened.

Larva.—Stage I. Head rounded, bilobed, with black patch on each lobe, labrum black, vertex slightly shaded with brown; tubercles small, conic; shields obscure; hair spinulose, the stronger ones brown, the others colourless.

Stage II. Hair dusky, those at extremities long; anal plate and cervical shield reddish; reddish spots on somite 4 over tubercle ii. and on 8 over i.

Stage III. Faint broken dorsal, subdorsal, and subventral white stripes and a series of subdorsal brownish grey spots, a large reddish one on somites 4 and 11.

Stage IV. Head with black patches on face and over eyes; jaws black; body grey finely irrorated with black; a white dorsal band formed of intrasegmental blotches, each of three transverse confluent streaks; a waved black lateral line forming segmental loops on thorax and on somites 5–9 forming oblique lines; a series of black streaks below wart v.; warts i., ii., v., vi. dull orange; pale yellow, black-edged dots most distinct on thorax, on somite 2, and below lateral black band; hair blackish dorsally, pale subventrally.

Stage V. Thorax with the dorsal white line nearly obsolete and the subdorsal black line more lateral than on abdomen. Food-plant, lichens on bark of oaks. 10–4.

776 *b*. Illice injecta. (Plate XXXV. fig. 23.)

Illice injecta, Dyar, Proc. Ent. Soc. Wash. vi. p. 199 (1904).
Illice injecta, var. *gamma*, Dyar, Proc. Ent. Soc. Wash. vi. p. 199 (1904).

Head and tegulæ yellow or pink, thorax sometimes shaded with grey; abdomen pink. Fore wing slate-grey; a broad costal yellow fascia, diffused below; a triangular patch on inner area before tornus, connected with base by a fascia on inner margin. Hind wing pink with a diffused grey patch at apex.

Ab. 1. *gamma*. Fore wing with the costal fascia absent; hind wing with the terminal band more developed.

Hab. U.S.A., Maryland, Plummer's I., Wisconsin, Badger, Alabama, 1 ♀, N. Carolina, Tryon, Missouri, Kirkwood. *Exp.* 18–22 millim.

777 *a*. Illice roseiceps. (Plate XXXV. fig. 24.)

Illice roseiceps, Hmpsn. A. M. N. H. (7) xv. p. 436 (1905).

♂. Head, tegulæ, and patagia crimson; frons, antennæ, and thorax fuscous; legs crimson and fuscous; abdomen crimson. Fore wing greyish fuscous; a yellow fascia on inner margin from base to a postmedial triangular patch extending to above vein 2; a postmedial wedge-shaped patch from costa to lower angle of cell. Hind wing crimson, becoming yellow near the terminal fuscous band, which is wide at costa, narrowing to a point at tornus. Underside of fore wing with the postmedial patches confluent.

Hab. Paraguay, Sapucay (*Foster*), 1 ♂ type. *Exp.* 24 millim.

777 *b*. Illice flagrans. (Plate XXXV. fig. 25.)

Illice flagrans, Hmpsn. A. M. N. H. (7) xi. p. 348 (1903).

Head and thorax deep orange; frons, antennæ, and patagia black; legs black; abdomen crimson. Fore wing fuscous black with orange-yellow fascia on inner margin expanding into a conical patch before tornus. Hind wing scarlet with black terminal band very wide at costa, narrowing to a point at tornus.

Hab. Argentina, Goya (*Perrens*), 2 ♂, 5 ♀ type. *Exp.* 18 millim.

778 *a*. Illice rhodocraspis. (Plate XXXV. fig. 26.)

Illice rhodocraspis, Hmpsn. A. M. N. H. (7) xv. p. 436 (1905).

♂. Head and thorax grey-brown; palpi except at tips, tegulæ, pectus, femora, and the whole of hind legs crimson; abdomen crimson. Fore wing grey-brown, the costal edge crimson. Hind wing crimson with rather narrow terminal fuscous band, expanding towards apex and narrowing to a point at tornus.

Hab. Argentina, Sta. Fé, Ocampo (*Wagner*), 1 ♂ type. *Exp.* 16 millim.

*779 *a*. Illice griseola. (Plate XXXV. fig. 27.)

Odozana griseola, Roths. Nov. Zool. xx. p. 196 (1913).

♂. Head and thorax brownish white, the palpi and antennæ dark brown, the tegulæ pale crimson; pectus and legs white, the fore and mid tibiæ and the tarsi suffused with brown; abdomen crimson. Fore wing brownish white, the inner area suffused with brown. Hind wing crimson with a grey-brown terminal band, broad at costa, narrowing to a point at vein 1. Underside of fore

wing dark grey-brown; hind wing with the costal area grey-brown.

Hab. Brazil, Rio Janeiro, type † ♂ in Coll. Rothschild, Minas Geraes, San Jacintho Valley (*Ottoni*). *Exp.* 18 millim.

780. **Illice bisigna.** (Plate XXXV. fig. 28.)

*781 *a*. **Illice rubricollis.** (Plate XXXV. fig. 29.)

Illice rubricollis, Schaus, Pr. U.S. Nat. Mus. xxix. p. 200 (1905).

♀. Head and thorax black-brown; tegulæ and abdomen crimson. Fore wing dull olive-brown. Hind wing black-brown with slight crimson suffusion on inner area to beyond middle.

Hab. Fr. Guiana, Cayenne, type † ♀ in U.S. Nat. Mus. *Exp.* 16 millim.

*783 *a*. **Illice blanda.**

Illice blanda, D. Jones, Trans. Ent. Soc. 1914, p. 8, pl. i. f. 20.

♂. Head and thorax chocolate-brown, the antennæ ringed with whitish, the vertex of head and tegulæ orange-yellow, the tips of patagia and metathorax behind pale yellow; pectus and legs orange-yellow, the fore legs dark brown with the base of tarsi yellow, the mid tibiæ with brown bands at base and tips; abdomen orange-yellow. Fore wing chocolate-brown with a cupreous tinge; a pale golden yellow patch on basal area from below costa to inner margin, its upper edge curved; a pale golden yellow post-medial band, oblique from discal fold to inner margin. Hind wing orange-yellow with a chocolate-brown apical patch.

Hab. Brazil, Santos, Alto del Serra (*D. Jones*), type † ♂ in Coll. D. Jones. *Exp.* 22 millim.

783 *b*. **Illice persimilis.** (Plate XXXV. fig. 30.)

Illice persimilis, Hmpsn. A. M. N. H. (7) xi. p. 348 (1903).

♂. Head, tegulæ, and patches on patagia yellowish white; palpi, frons, and thorax purplish brown; antennæ black with white patches on the joints above; pectus, legs, and abdomen yellow, the fore legs striped with fuscous. Fore wing purplish brown with broad yellowish white fascia on basal half of inner margin; somewhat conical postmedial patches on costa and inner margin. Hind wing yellow with small apical brown patch.

♀. Fore wing without the postmedial patch on costa; hind wing and the discal area of fore wing on underside tinged with scarlet, the former with hardly a trace of brown at apex.

Hab. Brazil, Rio Janeiro (*Doer*), 2 ♂, 2 ♀ type. *Exp.* 22 millim.

783 *c*. **Illice cryptopyra.** (Plate XXXV. fig. 31.)

Illice cryptopyra, Hmpsn. A. M. N. H. (7) xi. p. 348 (1903).

Head, tegulæ, and patagia orange-yellow; thorax purplish fuscous; legs mostly purplish fuscous; abdomen scarlet. Fore wing fuscous suffused with purple; an orange-yellow fascia on inner area from base to middle and semicircular postmedial patches on costa and inner margin. Hind wing scarlet, the cilia black. Underside of fore wing scarlet with the basal half of costa and a patch in and below end of cell black; a black terminal band with sinuous inner edge.

Hab. Brazil, Rio Janeiro, Tijuca (*S. R. Wagner*), 1 ♂, 2 ♀ type. *Exp.* 24 millim.

*783 *d*. **Illice triplagiata.** (Plate XXXV. fig. 32.)

Illice triplagiata, Roths. Nov. Zool. xx. p. 200 (1913).

♀. Head and thorax yellowish white, the palpi at tips, a patch above frons, the antennæ, and a patch on metathorax blackish; fore legs and the mid legs, except towards base, brown; abdomen crimson, the ventral surface yellow. Fore wing brown with a greyish gloss, the costal edge blackish to a triangular pale yellowish postmedial patch from costa edged with blackish; an elongate pale yellowish patch on basal half of inner margin and a conical patch at tornus, both edged with blackish and with blackish between them. Hind wing crimson with a small black patch on apical part of termen. Underside of fore wing with the inner area and the postmedial costal patch, which is almost conjoined to the patch on inner area, pale crimson.

Hab. Mexico, Vera Cruz, Huatuxco, type † ♀ in Coll. Rothschild. *Exp.* 20 millim.

*785 *a*. **Illice dorsimacula.** (Plate XXXV. fig. 33.)

Illice dorsimacula, Dyar, Proc. Ent. Soc. Wash. vi. p. 199 (1904).

Head, thorax, and fore wings sandy grey, the last with small dirty white spot on inner margin before tornus with a minute one above it at middle of wing. Hind wing and abdomen yellowish tinged with pink, the former with dark terminal band towards apex.

Hab. U.S.A., California, Los Angeles. *Exp.* 20 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

*785 *b*. **Illice liberomacula.** (Plate XXXV. fig. 34.)

Illice liberomacula, Dyar, Proc. Ent. Soc. Wash. vi. p. 199 (1904).

Head and thorax sandy grey; tegulæ partly whitish; abdomen dull yellowish. Fore wing grey with a bifid silvery white spot

beyond lower angle of cell connected with the costa by a more or less complete series of points. Hind wing dull yellowish, the costal and apical areas more or less broadly suffused with grey.

Hab. U.S.A., California, Los Angeles. *Exp.* 17–19 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

787. Illice faustinula.

Larva. Williams, Ent. News Philad. xvi. p. 257 (1905).

Head green blotched with black; body blackish; dorsal line creamy pink edged by a grey band blotched with black, broader on the four anterior and two terminal somites, the band somewhat crescentic on each somite; a subdorsal black band much interrupted by grey; a lateral grey band and sublateral very irregular black band; legs and ventral surface pale grey; a broad purplish ventral line and purplish spots on base of prolegs; stigmata grey; warts lemon-yellow bearing long hairs, those above the lateral line blackish, those below pale grey with black bands. Food-plants, Lichens.

Cocoon of fine silk mixed with hairs.

I. nexa was raised from similar larvæ and probably from the same batch of eggs, and is probably a variety of *faustinula*.

789. Illice citrina, insert :—

Illice citrina, intacta, Roths. Nov. Zool. xx. p. 199 (1913).

Hind wing of male with the black on termen extending to vein 1.

Peru, Carabaya, R. Huacamayo (*Ockenden*), type †♂ in Coll. Rothschild.

*789 *a*. Illice tessellata. (Plate XXXV. fig. 35.)

Illice tessellata, Dogn. Mém. Soc. Ent. Belg. xix. p. 127 (1912).

♀. Head and thorax yellowish white, the vertex of head with brown patch, the tegulæ and patagia edged with brown; palpi yellow; pectus yellow and brown; legs yellow, the tibiæ and tarsi banded with brown; abdomen yellow. Fore wing silvery white with a golden gloss; the base brown except on inner area; the costal edge brown to the curved brown antemedial band, which is connected by a streak on median nervure with a brown postmedial band expanding at middle and enclosing a white spot beyond lower angle of cell; the terminal part of costa brown; a brown streak in discal fold from the postmedial band to termen; cilia brown. Hind wing yellow, the apical area brown, broad at costa, narrowing to a point at vein 1. Underside of fore wing with the patches of basal half yellow, the terminal half brown with a whitish subapical patch.

Hab. Colombia, Rio Dagua, Ximines (*Fassl*), type † ♀ in Coll. Dognin. *Exp.* 16 millim.

790 *a*. **Illice crœsus**, n. sp. (Plate XXXV. fig. 36.)

Illice opulentana, Hmpsn. Cat. Lep. Phal. B.M. ii. p. 372, ♀ (nec ♂).

♂. Fore wing with oblique metallic blue postmedial line from vein 3 to inner margin; hind wing with the terminal black band narrower and not reaching tornus.

Hab. Colombia, Muzo (*Fassl*), ♂ in Coll. Dognin; Brazil, Espiritu Santo, 1 ♀ type. *Exp.* ♂ 16, ♀ 20 millim.

791. **Illice ruficollis**, insert (syn.):—

Parillice deceptans, Dyar, Insec. Inscit. Menstr. i. 6, p. 75 (1913).

793. **Metalobosia anitras**. insert:—

Lithoprocis postcærulescens, Roths. Nov. Zool. xx. p. 194 (1913), ♀ (nec ♂).

Peru, Carabaya, Tinguri (*Ockenden*), ♂ (not ♀) in Coll. Rothschild.

*793 *a*. **Metalobosia ducalis.**

Metalobosia ducalis, Schaus, A.M.N.H. (8) vii. p. 364 (1911).

Fore wing of male with the inner area strongly arched; hind wing with the termen excurved at middle, the inner area forming a very large lobe doubly folded over on underside and containing a fringe of long yellow scales on upperside of wing; hind tibiæ with thick fringe of long hair on upperside; abdomen with lateral tufts of long hair on 4th segment.

Fig. 211.—*Metalobosia ducalis*, ♂. ½.

♂. Head and thorax black-brown suffused with metallic green; hind femora above and the fringe of hair on tibia pale crimson; abdomen crimson with the extremity black, the lateral tufts of hair white. Fore wing black-brown suffused with metallic green. Hind wing deep crimson with a black-brown terminal band, rather broad at apex and narrowing to a point at submedian fold where it terminates. Underside of fore wing brown with some metallic green at base of costa.

Hab. Costa Rica, Juan Vinas (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 18 millim.

*793 *b*. Metalobosia chalcoela. (Plate XXXVI. fig. 1.)

Metalobosia chalcoela, Dogn. Mém. Soc. Ent. Belg. xix. p. 127 (1912).

♀. Head and thorax blackish suffused with bronze-green; pectus, legs, and abdomen blackish suffused with metallic green. Fore wing silvery metallic green, the basal area golden brown. Hind wing fuscous black. Underside of both wings black-brown with a slight bluish gloss.

Hab. Colombia, Cañon del Tolima (*Fassl*), type † ♀ in Coll. Dognin. *Exp.* 20 millim.

*794 *a*. Metalobosia holophæa.

Metalobosia holophæa, Dogn. Mém. Soc. Ent. Belg. xix. p. 127 (1912).

Fore wing of male with the inner margin strongly lobed but not fringed with long hair; hind wing with the tornus slightly lobed with fringes of hair above and below, the termen deeply excised at vein 1, a ridge of androconia in lower part of cell on underside with fringe of hair above it, the area beyond the cell clothed with rough androconia.

♂. Head and thorax black; abdomen fuscous brown; legs and ventral surface of abdomen suffused with metallic green. Fore wing fuscous black tinged with metallic green. Hind wing with

Fig. 212.—*Metalobosia holophæa*, ♂. ½.

the costal half fuscous black tinged with metallic green; the inner half fuscous brown with the submedian interspace greyish; the underside fuscous brown, the costa tinged with metallic green, the androconia in cell black, the fringe of hair pale ochreous and the androconia beyond the cell pale grey.

Hab. Colombia (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 20 millim.

795 *a*. Metalobosia invarda. (Plate XXXVI. fig. 2.)

Metalobosia invarda, Schaus, Pr. U.S. Nat. Mus. xxix. p. 201 (1905).

♂. Head and thorax black-brown with a leaden gloss; abdomen crimson, the 1st segment with purple-brown dorsal patch, the last

two segments and ventral surface purple-brown. Fore wing suffused with brilliant cupreous purple. Hind wing crimson, the costal and terminal areas black-brown, the terminal band ending in a point at tornus.

Hab. Fr. Guiana, St. Jean Maroni, type † ♂ in U.S. Nat. Mus., Maroni R. (*Schaus*), 1 ♂. *Exp.* 20 millim.

*795 *b*. **Metalobosia postrubida.** (Plate XXXVI. fig. 3.)

Odozana postrubida, Roths. Nov. Zool. xx. p. 197 (1913).

♂. Head, thorax, and abdomen black-brown suffused with metallic blue. Fore wing black-brown suffused with metallic blue. Hind wing deep crimson; the basal area black-brown with obliquely incurved inner edge extending to tornus; the costa narrowly brown; an apical black patch extending to vein 3, tinged with metallic blue on underside.

Hab. Panama, Chiriqui, type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

*795 *c*. **Metalobosia atriloba.** (Plate XXXVI. fig. 4.)

Metalobosia atriloba, Dogn. Mém. Soc. Ent. Belg. xix. p. 128 (1912).

♂. Head, thorax, and abdomen black-brown. Fore wing dark brown suffused with black. Hind wing crimson, the inner area broadly black; the termen black, expanding at apex; the underside with the costa narrowly black-brown.

Hab. Colombia (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 18 millim.

796 *a*. **Metalobosia diaxantha**, n. sp.

Hind wing of male with the tornus not produced.

♂. Head and thorax brown with a cupreous gloss, the shoulders with yellowish spots; antennæ black, whitish at base; pectus

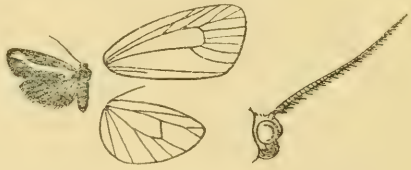

Fig. 213,—*Metalobosia diaxantha*, ♂. $\frac{3}{2}$.

yellow; legs banded yellow and brown; (abdomen wanting). Fore wing brown with a cupreous gloss; a small subbasal yellowish spot on the costa; a yellowish fascia below median nervure from

base to beyond the cell, emitting a spur to inner margin near base and with yellowish spot above its extremity below the apex. Hind wing brown, the basal area pale pink except at inner margin. Underside of both wings ochreous yellow; fore wing with the margins brown; hind wing with the termen brown.

Hab. Brazil, Amazons, Ega (*Bates*), 1 ♂ type. *Exp.* 14 millim.

Genus **ARHABDOSIA.**

Type.

Arhabdosia, Dyar, Pr. U.S. Nat. Mus. xxix. p. 174 (1905) ..... *subvarda.*

Proboscis fully developed; palpi minute, not reaching beyond the frons; antennæ of male with cilia and bristles; hind tibiæ with two pairs of spurs; abdomen with large lateral tuft of hair at extremity. Fore wing with veins 3, 4 from angle of cell; 5 from above angle; 6 from well below upper angle; 7, 8, 9 stalked, 7 from beyond 9; 10, 11 from cell, the latter curved and approximated to 12. Hind wing with veins 3, 4 stalked; 5 absent; 6, 7 coincident; the tornus produced to a rounded lobe.

In key differs from *Diarhabdosia* in the hind wing having veins 6, 7 coincident.

*796 *b.* **Arhabdosia subvarda.**

Arhabdosia subvarda, Schaus, Pr. U.S. Nat. Mus. xxix. p. 201 (1905).

♂. Head and thorax dull brown; antennæ and a band between their bases black; abdomen crimson, the extremity and ventral

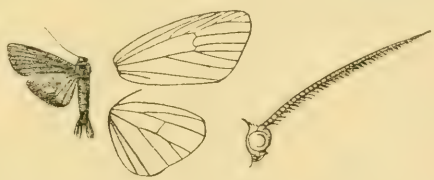

Fig. 214.—*Arhabdosia subvarda*, ♂. ½.

surface black. Fore wing dull brown with a purple gloss and irrorated with rough brown-tipped whitish scales. Hind wing crimson with the costal and terminal areas black, the terminal band ending in a point at tornus.

Hab. Fr. Guiana, St. Jean Maroni, type † ♂ in U.S. Nat. Mus. *Exp.* 20 millim.

Genus **NEOZANA**, nov.

Type, *N. germana.*

Proboscis fully developed; palpi porrect, slender, extending to just beyond the frons; antennæ of male ciliated, thickened with scales towards base; tibiæ with the spurs moderate. Fore wing narrow, the apex rounded, the termen obliquely curved; vein 2 from beyond middle of cell; 3, 4 from angle; 5 from above angle; 6 from upper angle; 7, 8, 9 stalked, 7 from beyond 9;

10, 11 from cell, oblique. Hind wing with the termen evenly curved; vein 2 from towards end of cell; 3, 4 stalked; 5 from well above angle; 6, 7 on a long stalk; 8 from middle of cell.

In key differs from *Eurosia* in the fore wing having vein 2 from beyond middle of cell, 3 from angle.

*796 *c.* Neozana germana.

Odozana germana, Roths. Nov. Zool. xx. p. 197 (1913).

♂. Head and thorax pale yellow; antennæ black, ringed with yellow towards base; fore legs with blackish bands at base and extremity of the tibiæ, the mid tibiæ with blackish band at extremity; abdomen crimson, the base and extremity yellow. Fore wing pale golden yellow, the costal edge black towards base; subbasal black points below costa and cell; a triangular antemedial mark defined by black above inner margin; an irregular mark defined by black from middle of costa to below the cell, its inner edge strongly angled outwards in discal fold and its outer edge slightly angled inwards on median nervure; postmedial line black, sinuous, oblique to vein 4 and incurved in submedian interspace,

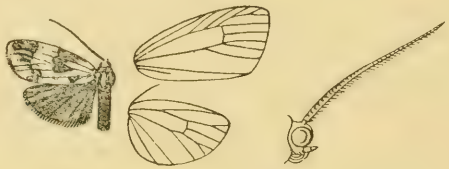

Fig. 215.—*Neozana germana*, ♂. $\frac{3}{2}$.

with black streaks beyond it on the veins, trifurcate towards apex, the streaks on veins 6 and 5 connected at extremities and the streaks on vein 4 and in submedian fold extending to termen; small black spots on termen at veins 4 and 3. Hind wing pale crimson, the costa yellow with a small blackish patch at apex. Underside of fore wing tinged with crimson, a diffused blackish patch from middle of costa and another on apical area leaving a yellow mark on termen below apex; hind wing with the apical black patch larger.

Hab. Peru, Carabaya, R. Huacamayo, La Union (*Klages*), type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

797. **Nodozana thricophora**, insert (syn.):—

Illice lacteociliata, Roths. Nov. Zool. xx. p. 199 (1913).

Venezuela, Cucuta, type † ♂ in Coll. Rothschild.

*797 *a*. **Nodozana boliviana.** (Plate XXXVI. fig. 5.)

Callisthenia prepielloides, boliviana, Roths. Nov. Zool. xx. p. 199 (1913).

♂. Head and thorax reddish brown, the back of head, tegulæ, and patagia white; pectus and legs pale yellow, the fore and mid tibiæ and tarsi brown; abdomen pale crimson. Fore wing reddish brown thickly pencilled with whitish scales; the basal area with large creamy white patch from just above median nervure to just above inner margin; a creamy white postmedial band edged by red-brown lines, and with a crimson discoidal spot on it, the inner line slightly excurved to median nervure, then slightly incurved, the outer line obliquely angled upwards to the discoidal spot from just below middle. Hind wing pale crimson with a narrow black-brown terminal band ending in a point at vein 2. Underside of fore wing pale crimson, with the costal area to beyond middle and the terminal area black-brown.

Hab. Bolivia, Buenavista (*Steinbach*), type † ♂ in Coll. Rothschild. *Exp.* 12 millim.

798 will stand as **Nodozana coresa**, Schaus, insert (syn.):—

Callisthenia prepielloides, Roths. Nov. Zool. xx. p. 198 (1913).

Brazil, São Paulo, type † ♂, ♀ in Coll. Rothschild.

798 *a*. **Nodozana rhodosticta.**

Cisthene rhodosticta, Butl. Trans. Ent. Soc. 1878, p. 53; Hmpsn. Cat. Lep. Phal. B.M. ii. p. 375, ♀ (nec ♂).
Prepiella rubripuncta, Roths. Nov. Zool. xx. p. 198 (1913).

Fore wing of male with the costa normal, the inner margin lobed at middle; hind wing with the inner area lobed and thickly

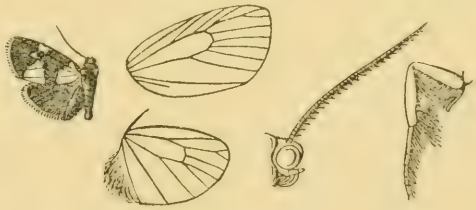

Fig. 216.—*Nodozana rhodosticta*, ♂. ¾.

fringed with rough hair and scales above and below; hind femora, tibiæ, the spurs and tarsi below fringed with long hair.

Hab. Br. Guiana, Orinoco R., Perico (*Cherrie*); Surinam, Maroewyn Valley, Aroewarwar Creek (*Klages*), type † ♂, *rubripuncta* in Coll. Rothschild; Brazil, Amazons, R. Purus (*Trail*), 1 ♀ type. *Exp.* 16 millim.

*798 *b*. Nodozana jucunda.

Nodozana jucunda, D. Jones, Trans. Ent. Soc. 1914, p. 9, pl. i. f. 22.

♂. Head, tegulæ, and tips of patagia pale golden yellow, the palpi at tips, frons, antennæ, and thorax dark cupreous brown; pectus and legs yellow, the fore legs in front, parts of mid legs, and the tuft of hair on hind tibiæ dark brown; abdomen crimson. Fore wing cupreous brown with pale golden yellow markings edged with chocolate-brown; a yellow patch on basal area from below costa to inner margin, its outer edge obliquely curved; a yellow postmedial band constricted at middle and with a round crimson discoidal spot on it; a chocolate-brown terminal line. Hind wing crimson. Underside of fore wing crimson, the costa chocolate-brown interrupted beyond middle by a yellowish white streak.

Hab. Brazil, Santos, Guarujá (*D. Jones*), type † ♂ in Coll. D. Jones. *Exp.* 18 millim.

798 *c*. Nodozana pyrophora.

Nodozana pyrophora, Hmpsn. A. M. N. H. (8) viii. p. 403 (1911).

Fore wing of male on underside with fringe of hair below middle of costa, a patch of androconia in middle of cell and another patch on discocellulars, some silky scaling below end of cell with hairy scaling before and beyond it, the neuration rather distorted; hind wing with vein 5 from lower angle of cell.

♂. Head, thorax, and abdomen creamy white; palpi, antennæ, pectus, legs, and ventral surface of abdomen slightly tinged with

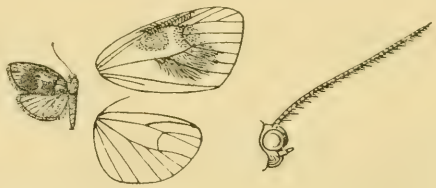

Fig. 217.—*Nodozana pyrophora*, ♂. ½.

brown. Fore wing creamy white; a small black discoidal spot; a large patch of fiery orange-red below and beyond the cell from before middle to near termen, extending slightly into the middle of cell and interrupted by a creamy white bar from lower angle of cell to vein 1, then bent outwards to tornus, the outer edge of the patch obliquely curved from below costa beyond the cell. Hind wing creamy white. Underside of fore wing creamy white, with the fringe of hair below costa and the patches of androconia fuscous brown.

Hab. Bolivia, Yungas la Paz (*Seebold*), 2 ♂ type. *Exp.* 18 millim.

*799 *a*. **Nodozana coccinicepS.** (Plate XXXVI. fig. 6.)

Nodozana coccinicepS, Dogn. Mém. Soc. Ent. Belg. xix. p. 128 (1912).

♀. Head, tegulæ, and prothorax bright crimson, the rest of thorax and abdomen black; antennæ black, white at tips. Fore wing black-brown with a slight bluish gloss. Hind wing bright crimson, the costal and terminal areas black, the latter with somewhat sinuous inner edge.

Hab. Colombia, Rio Toche, Quindin, type † ♀ in Coll. Dognin. *Exp.* 22 millim.

799 *b*. **Nodozana fifina.** (Plate XXXVI. fig. 7.)

Nodozana fifina, Dogn. Mém. Soc. Ent. Belg. xxii. p. 3 (1913).

♀. Head, thorax, and abdomen red-brown. Fore wing red-brown with a cupreous gloss. Hind wing crimson, the hair on inner margin blackish; a terminal black-brown band, rather broad at apex, narrowing to tornus; the underside with the costal area brown.

Hab. Panama, Lino (*Fassl*), 1 ♀ co-type. *Exp.* 20 millim. Type † ♀ in Coll. Dognin.

*800 *a*. **Nodozana bellicula.** (Plate XXXVI. fig. 8.)

Nodozana bellicula, Schaus, Pr. U.S. Nat. Mus. xxix. p. 201 (1905).

♂. Head and thorax fuscous mixed with whitish; abdomen crimson, yellowish at base, the ventral surface yellowish with fuscous bands on basal half. Fore wing white; the costa fuscous to the fuscous medial band, which has whitish marks on it below costa and in cell and is broad on costal half, narrower towards inner margin; a crimson discoidal spot; postmedial line oblique from costa to tornus, slightly sinuous, the veins beyond it strongly streaked with black, not quite reaching termen and interrupted at middle on veins 6, 7; cilia black. Hind wing yellow tinged with crimson; an apical black patch. Underside of fore wing with the pale areas suffused with crimson.

Hab. Fr. Guiana, St. Jean Maroni, type † ♂ in U.S. Nat. Mus. *Exp.* 14 millim.

*800 *b*. **Nodozana hieroglyphica.** (Plate XXXVI. fig. 9.)

Odozana hieroglyphica, Roths. Nov. Zool. xx. p. 197 (1913).

Head and thorax pale golden yellow; antennæ black-brown; patagia with black spots at shoulders and crimson tips; abdomen pale crimson, the anal tuft and ventral surface yellow. Fore wing pale golden yellow; the costa towards base and a subbasal bar from costa black, a short crimson streak below it above inner

margin; two black antemedial lines, obliquely curved to discal fold, then inwardly oblique, the outer line connected by a streak with some crimson above it with the postmedial line at median nervure; postmedial line black, oblique to discal fold, then curved inwards to meet the streak from the antemedial line at origin of vein 2, then with two lines from it to inner margin, the outer ending at tornus, the costa beyond it black to the black subterminal line, which is incurved below costa then oblique and sinuous to the termen at vein 3, some crimson beyond it below the costa and a patch below its extremity beyond the postmedial line. Hind wing pale crimson, the costa yellow, a small blackish spot at apex. Underside of fore wing with the cell and area beyond it suffused with crimson, a black spot at middle of costa and an oblique postmedial band from costa where it expands into a triangular patch to vein 4 near termen; hind wing with the apical spot larger.

Hab. Panama, Lino (*Fassl*); Ecuador, Paramba (*Rosenberg*), type † ♂ in Coll. Rothschild, Chimbo (*Rosenberg*), type † ♀. *Exp.* 16 millim.

*800 *c*. **Nodozana bifasciata.** (Plate XXXVI. fig. 10.)

Illice bifasciata, Roths. Nov. Zool. xx. p. 199 (1913).

♀. Head black-brown with a cupreous gloss; thorax yellow, the patagia and metathorax with cupreous brown patches; fore and mid legs deep cupreous brown with the first joint of tarsi yellow, the hind legs with the extremities of the tibiæ and tarsi brown; abdomen pale scarlet, the ventral surface yellow. Fore wing golden yellow; the costa towards base and ante- and postmedial bands black suffused with brilliant metallic blue, the bands somewhat oblique to discal fold, then slightly incurved; the costa towards apex and cilia black-brown. Hind wing pale crimson with a small black apical patch. Underside of fore wing pale scarlet; the costal area to the antemedial band and the costal half beyond the postmedial band blackish.

Hab. Peru, Carabaya, St. Domingo (*Ockenden*), type † ♀ in Coll. Rothschild, R. Huacamayo. *Exp.* 18 millim.

*800 *d*. **Nodozana picturata.** (Plate XXXVI. fig. 11.)

Nodozana picturata, Schaus, A. M. N. H. (8) vii. p. 364 (1911).

♂. Head, thorax, and abdomen white, the anal tuft slightly tinged with ochreous. Fore wing white, the inner half except at base and the terminal half except towards costa tinged with pale yellow; a faint reddish antemedial line, oblique from costa to median nervure; a large rounded orange-red patch on medial area from cell to inner margin; a blackish discoidal point; postmedial line brownish and very oblique from costa to vein 7, then reddish, obliquely incurved to vein 1 and erect to inner margin near tornus;

an oblique pale brownish band across apical area; cilia tinged with pale brown on apical half. Hind wing pure white. Underside of fore wing white, the costal area suffused with brown from near base to the oblique subapical band.

Hab. Costa Rica, Sixola R. (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 26 millim.

*800 *e*. **Nodozana roseofuliginosa.** (Plate XXXVI. fig. 12.)

Illice roseofuliginosa, Roths. Nov. Zool. xx. p. 199 (1913).

♂. Head and thorax dark fuscous brown, a line behind antennæ and the tegulæ white, the neck with crimson ring; abdomen pale crimson with dorsal brownish streak, the ventral surface dark brown. Fore wing dark fuscous brown; a small crimson patch at base of inner margin; a white bar from costa beyond middle and band from lower angle of cell to inner margin emitting a spur on inner side in submedian fold. Hind wing pale crimson, the terminal area dark fuscous brown narrowing to a point at vein 1; the underside with the basal half of costa suffused with brown.

Hab. Brazil, Entre Rios, La Soledad (*Britton*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

*800 *f*. **Nodozana endoxantha.** (Plate XXXVI. fig. 13.)

Nodozana endoxantha, D. Jones, Trans. Ent. Soc. 1908, p. 145.

♂. Head, thorax, and abdomen bright orange-yellow, the thorax with slight black dorsal streak; palpi black with the basal joint orange; frons and antennæ black; fore and mid legs and the hind tarsi fuscous. Fore wing greyish brown; a broad orange fascia on inner area not quite reaching termen, extending to submedian fold, its extremity rounded and expanding to vein 3; an elliptical orange spot on costa just beyond middle. Hind wing orange-yellow with black terminal band expanding widely on apical area, then narrow. Underside of fore wing with the costal spot joined by a broad band to the fascia on inner area which extends to just above submedian fold.

Hab. Brazil, Castro Paraña, type † ♂ in Coll. D. Jones. *Exp.* 24 millim.

802 *a*. **Seripha plumbeola.** (Plate XXXVI. fig. 14.)

Seripha plumbeola, Hmpsn. A. M. N. H. (8) iv. p. 356 (1909).

♂. Uniform fuscous brown with a purplish grey gloss.

Hab. Cuba, Baracoa (*Schaus*), 1 ♂ type; Ecuador, Chimborazo, 1 ♂. *Exp.* 16 millim.

Genus **PROLOBOSIA**, nov.

Type, *P. schistacea*.

Proboscis fully developed; palpi upturned to near vertex of head, slender; frons smooth; antennæ of male ciliated; tibiæ with the spurs long. Fore wing with the costa lobed rather before middle, then somewhat excised, the apex rounded, the termen evenly curved; vein 2 from beyond middle of cell; 3 from well before angle; 4, 5 from angle; 6 from upper angle; 7, 8, 9 stalked, 7 from beyond 9; 10, 11 from cell, the latter oblique. Hind wing with vein 2 from towards angle of cell; 3, 4 coincident; 5 from well above angle; 6, 7 stalked to near apex; 8 from middle of cell; male with a fold on upperside at middle of submedian fold containing tufts of hair.

In key differs from *Halone* in the fore wing having vein 3 from well before angle of cell, 5 from angle, the costa lobed before middle.

*802 *b*. **Prolobosia schistacea.**

Procrimima schistacea, Roths. Nov. Zool. xx. p. 224 (1913).

♂. Head, thorax, and abdomen brown suffused with silvery blue-grey. Fore wing uniform brown suffused with silvery blue-

Fig. 218.—*Prolobosia schistacea*, ♂. ½.

grey. Hind wing pale brown suffused with silvery blue-grey, the hair in the fold below the cell grey and dark chocolate-brown.

Hab. Peru, Carabaya, S. Domingo (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

Genus **ASCAPTESYLE**.

Ascaptesyle, Dyar, Pr. U.S. Nat. Mus. xxix. p. 175 (1905). Type. *submarginata*.

Proboscis fully developed; palpi porrect to just beyond the frons; antennæ of female ciliated; hind tibiæ with two pairs of spurs. Fore wing with vein 3 from before angle of cell; 4, 5 stalked; 6 from well below upper angle; 7, 8, 9 stalked, 7 from beyond 9; 10, 11 from cell, 11 curved and approximated to 12. Hind wing with veins 3, 4 from angle of cell; 5 absent; 6, 7 coincident.

In key differs from *Lycomorphodes* in the fore wing having vein 7 from 8 beyond 9, 11 not anastomosing with 12; hind wing with veins 3, 4 from cell.

*802 *c*. Ascaptesyle submarginata.

Ascaptesyle submarginata, Schaus, Pr. U.S. Nat. Mus. xxix. p. 201 (1905).

♀. Head, thorax, abdomen, and fore wing reddish brown shot

Fig. 219.—*Ascaptesyle submarginata*, ♀. ½.

with purple. Hind wing crimson, the costal area and termen black-brown, the terminal line narrow except at apex.

Hab. Trinidad, type † ♀ in U.S. Nat. Mus. *Exp.* 22 millim.

*802 *d*. Ascaptesyle purpurascens. (Plate XXXVI. fig. 15.)

Odozana purpurascens, Roths. Nov. Zool. xx. p. 196 (1913).

♀. Head and thorax dark red-brown with a purplish gloss; abdomen dark red-brown. Fore wing dark red-brown with a purplish gloss. Hind wing crimson; a terminal dark red-brown band, broad at costa, narrowing to a point at tornus; the hair on inner margin red-brown; the underside with the costal area red-brown.

Hab. Peru, R. Suambari, La Oroya (*Ockenden*), type † ♀ in Coll. Rothschild. *Exp.* 20 millim.

*804 *a*. Lycomorphodes hemicrocea. (Plate XXXVI. fig. 16.)

Lycomorphodes hemicrocea, Dogn. Ann. Soc. Ent. Belg. liii. p. 218 (1909).

♂. Head, thorax, and abdomen black-brown with a faint bluish gloss. Fore wing with the basal half black glossed with metallic blue, its outer edge irregular and produced as short streaks along median nervure and inner margin; the terminal half orange-red with a brownish streak from end of cell to termen; cilia black. Hind wing fuscous brown with a faint bluish gloss, the costa with some ochreous. Underside of fore wing fuscous brown with the terminal half of costal area orange-red.

Hab. Colombia, type † ♂ in Coll. Dognin. *Exp.* 22 millim.

804 *b*. Lycomorphodes tortricina. (Plate XXXVI. fig. 17.)

Lycomorphodes tortricina, Roths. Nov. Zool. xx. p. 200 (1913).

Head and thorax yellow with black-brown fascia on tegulæ and patagia; antennæ black except basal joint; fore legs and

hind tibiæ and tarsi towards extremities dark brown; abdomen yellow suffused with brown except towards base, the ventral surface dark brown. Fore wing yellow with a slight rufous tinge; the costal edge blackish towards base; an oblique brownish streak above base of inner margin; a broad reddish brown medial shade interrupted at discal and submedian folds; the terminal area dark brown, narrowing to tornus and interrupted by a yellow streak at discal fold. Hind wing yellow with a slight rufous tinge, the termen suffused with brown and the hair on terminal half of inner margin brown. Underside of fore wing with a brownish shade in and below medial part of cell, the brown terminal area not interrupted at middle.

Hab. Trinidad, Caparo (*Klages*), type † ♂ in Coll. Rothschild; Venezuela, Esteban Valley, Las Quiguas, 2 ♂, 1 ♀. *Exp.* 22 millim.

805 *a*. **Lycomorphodes correbioides.** (Plate XXXVI. fig. 18.)

Lycomorphodes correbioides, Schaus, A. M. N. H. (8) vii. p. 364 (1911).

Head yellow with some brown on vertex; antennæ brown; thorax yellow mixed with some brown; legs brown, the tarsi with the 1st joint whitish; abdomen brown, the anal tuft yellow mixed with brown. Fore wing yellow; a broad diffused brown medial band from just below costa to inner margin; the terminal area brown, its inner edge indented by yellow at middle. Hind wing uniform brown; the underside with the costa yellow to beyond middle.

Hab. Costa Rica, Sixola R. (*Schaus*), 1 ♂, 1 ♀. *Exp.* 16 millim.

*805 *b*. **Lycomorphodes aracia.**

Lycomorphodes aracia, D. Jones, Trans. Ent. Soc. 1914, p. 9, pl. i. f. 23.

♂. Head orange-yellow, the palpi except at base, frons, and antennæ dark brown; thorax and abdomen dark chocolate-brown, streaks on shoulders, fore coxæ at base, and base of tarsi orange-yellow; the anal tuft yellow above at tip. Fore wing chocolate-brown; an orange-yellow streak below base of costa; a narrow rather diffused orange-yellow postmedial band interrupted at discal fold where its outer edge is produced to a short streak and slightly bent outwards to inner margin. Hind wing chocolate-brown with a greyish tinge, the costa yellowish to beyond middle. Underside of fore wing with the postmedial band reduced to a spot on costa.

Hab. Brazil, São Paulo, Aracatuba (*D. Jones*), type † ♂ in Coll. D. Jones. *Exp.* 18 millim.

*805 *c*. **Lycomorphodes calopteridion.** (Plate XXXVI. fig. 19.)

Lycomorphodes calopteridion, de Joan. Bull. Soc. Ent. Fr. 1904, p. 289.

♂ Head and thorax black, the vertex of head and tegulæ with

broad dorsal yellow stripe, the shoulders and outer edges of patagia with yellow stripes; fore coxæ at base yellow, the tips of terminal spurs and the 1st joint of tarsi white; abdomen fuscous brown with some yellow in anal tuft. Fore wing black-brown with a slight bluish gloss, the costal area orange-yellow to beyond middle, extending at base to near inner margin with a diffused dark fascia on it below the cell, the costal edge black on basal half; a dark wedge-shaped streak in cell from before middle to the dark terminal area. Hind wing fuscous brown with a greyish tinge.

Hab. Brazil, Neu Fribourg, type † ♂ in Coll. Joannis. *Exp.* 20 millim.

*805 *d*. **Lycomorphodes epatra.** (Plate XXXVI. fig. 20.)

Lycomorphodes epatra, Schaus, Pr. U.S. Nat. Mus. xxix. p. 202 (1905).

♂. Head and thorax blue-black; vertex of head and a mark on prothorax orange; legs yellowish at base, the 1st joint of tarsi yellow; abdomen black with some grey in anal tuft. Fore wing black suffused with leaden blue; a short orange streak below base of costa. Hind wing fuscous black.

Hab. Fr. Guiana, St. Jean Maroni, type † ♂ in U.S. Nat. Mus. *Exp.* 20 millim.

*806 *a*. **Lycomorphodes dichroa.** (Plate XXXVI. fig. 21.)

Lycomorphodes dichroa, Dogn. Mém. Soc. Ent. Belg. xix. p. 128 (1912).

♀. Head and thorax fulvous yellow; palpi at tips, frons, and antennæ black; pectus and legs blackish, the tarsi with the 1st joint yellowish white; abdomen blackish. Fore wing fulvous yellow, the terminal area blackish with a silvery gloss, its inner edge slightly indented at middle. Hind wing brown. Underside of fore wing suffused with brown except on costal area.

Hab. Colombia, Yuntas, type † ♀ in Coll. Dognin. *Exp.* 20 millim.

807 *a*. **Lycomorphodes bicolor.** (Plate XXXVI. fig. 22.)

Lycomorphodes bicolor, Roths. Nov. Zool. xx. p. 200 (1913).

♀. Head and thorax yellow tinged with dull orange; a blackish streak on outer edge of tegulæ and upper edge of patagia; antennæ black except basal joint; palpi, frons, pectus, legs, and abdomen fuscous black, the 1st joint of tarsi yellowish white. Fore wing yellowish suffused with dull orange and slightly irrorated with brown; a slight blackish streak below the discal fold from termen to the discocellulars. Hind wing fuscous black. Underside of fore wing suffused with fuscous black except the costal area to beyond middle and the inner margin.

♂. Fore wing with the streak from termen deep black and more oblique from below apex to near lower angle of cell; cilia blackish;

the underside suffused with fuscous except the terminal half of costal area.

Hab. Colombia, W. Cordillera, Pichindé (*Fassl*), type † ♀ in Coll. Rothschild; Brazil, São Paulo (*D. Jones*), 1 ♂. *Exp.* ♂ 16, ♀ 22 millim.

807 *b*. **Lycomorphodes flavipars.** (Plate XXXVI. fig. 23.)

Lycomorphodes flavipars, Hmpsn. A. M. N. H. (8) iv. p. 356 (1909).

♂. Head and thorax orange-yellow with fuscous brown stripes on dorsum and shoulders; palpi, lower part of frons, and antennæ brown; fore legs brown with some yellowish on femora and 1st joint of tarsi; mid and hind legs yellow banded with brown; abdomen crimson, the extremity and ventral surface yellow, some fuscous at tip of anal tuft and before the anal tuft on ventral surface. Fore wing fuscous brown; the inner margin orange-yellow expanding into a patch at base; a broad postmedial orange-yellow band, its inner edge excurved, its outer angled outwards at middle and to tornus. Hind wing deep crimson with terminal fuscous band, rather broad at apex and narrowing to a point at submedian fold.

Ab. 1. Abdomen with the anal tuft wholly black; fore wing yellow tinged with scarlet, the black-brown markings reduced to a fascia on basal half of costa and streak on median nervure to just beyond end of cell.

Hab. Panama, Lino (*Fassl*); W. Colombia, Jiminez, 1 ♂ type. *Exp.* 20 millim.

*807 *c*. **Lycomorphodes coccipyga.**

Lycomorphodes coccipyga, Dogn. Ann. Soc. Ent. Belg. liii. p. 218 (1909).

Fore wing with vein 11 free; hind wing with vein 8 anastomosing with 7 to beyond the cell.

♂. Head and thorax black-brown with a few metallic scales; abdomen crimson with the extremity and ventral surface black-

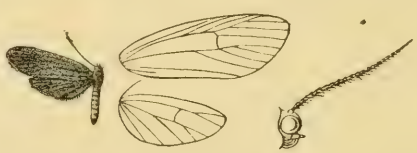

Fig. 220.—*Lycomorphodes coccipyga*, ♂. $\frac{2}{3}$.

brown. Fore and hind wings black-brown irrorated with a few silvery-white scales and with a faint greenish gloss.

Hab. Curaçoa, type † ♂ in Coll. Dognin. *Exp.* 16 millim.

*807 *d*. **Lycomorphodes circinata.** (Plate XXXVI. fig. 24.)

Lycomorphodes circinata, Dogn. Hét. Nouv. Am. Sud, iii. p. 8 (1911).

♂. Head and thorax black-brown mixed with metallic green; abdomen black-brown with a crimson band on penultimate segment except on ventral surface. Fore wing black-brown irrorated with metallic green. Hind wing fuscous brown, the basal area paler.

Hab. Colombia, Rio Agnatal (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 16 millim.

Genus **NEOTALARA**, nov.

Proboscis fully developed; palpi porrect, slight, reaching to just beyond the frons, which is smooth; antennæ of male ciliated and somewhat laminate. Fore wing with vein 3 from before angle of cell; 4, 5, from angle; 6 stalked with 7, 8, 9, 7 from beyond 9; 10, 11, from cell, 11 anastomosing with 12. Hind wing with vein 2 from towards end of cell; 3, 4 stalked; 5 absent; 6, 7 conicident; 8 from near end of cell.

In key differ from *Diarhabdosia* in the hind wing having veins 6, 7 coincident; fore wing with vein 6 stalked with 7, 8, 9, 11 anastomosing with 12.

807 *e*. **Neotalara metamelæna**, n. sp.

♂. Head and thorax grey-white mixed with fuscous; antennæ fuscous; abdomen grey suffused with brown. Fore wing grey-white irrorated with brown except on terminal area, the costal area towards base and inner area more suffused with brown; the post-medial area with brown shade from discal fold to inner margin;

Fig. 221.—*Neotalara metamelæna*, ♂. ½.

cilia brown. Hind wing black, the base, inner margin and terminal area grey suffused with brown. Underside of fore wing fuscous black with the terminal area whitish; hind wing whitish tinged with fuscous except at costa.

Hab. Ecuador, Quevedo, 1 ♂ type. *Exp.* 16 millim.

Page 380. Genus **TALARA**, insert :—

	Type.
Abrochocis, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 170 (1914) ...	*esperanza*.

808 *a*. **Talara esperanza.** (Plate XXXVI. fig. 25.)

Talara esperanza, Schaus, A. M. N. H. (8) vii. p. 365 (1911).

Head, thorax, and abdomen pale scarlet. Fore wing pale yellow, the veins, costal and inner areas scarlet; the area from near base to

the black medial line thickly irrorated with black scales except at costa; medial line black, excurved from below costa to median nervure, then sinuous; postmedial line black, oblique from costa to vein 5, then inwardly oblique to submedian fold and slightly excurved above inner margin, a band of black irroration beyond it except at costa; a terminal scarlet line; cilia white. Hind wing pale scarlet.

Hab. Costa Rica, Esperanza (*Schaus*), 1 ♂, Tuis (*Schaus*), 1 ♀. *Exp.* 14–16 millim.

*808 *b*. **Talara subcoccinea.** (Plate XXXVI. fig. 26.)

Talara subcoccinea, Schaus, Pr. U.S. Nat. Mus. xxix. p. 202 (1905).

♂. Head and thorax pale rufous irrorated with dark rufous; tarsi ringed with black; abdomen pale crimson, the anal tuft black above. Fore wing pale rufous irrorated with dark rufous; an indistinct oblique medial line from cell to inner margin; traces of a subterminal line towards inner margin; cilia blackish at tips and above tornus. Hind wing pale crimson; cilia black-tipped at apex. Underside of fore wing suffused with crimson except costal and terminal areas.

Hab. Fr. Guiana, St. Jean Maroni, type † ♂ in U.S. Nat. Mus. *Exp.* 20 millim.

*808 *c*. **Talara ornata.** (Plate XXXVI. fig. 27.)

Talara ornata, Schaus, Pr. U.S. Nat. Mus. xxix. p. 202 (1905).

♂. Head and tegulæ whitish irrorated with brown; antennæ ringed with brown; thorax blackish, with paired whitish marks on metathorax; tibiæ and tarsi banded with black; abdomen crimson, the anal tuft black, the ventral surface whitish. Fore wing whitish irrorated with red-brown leaving a white conical patch on inner area before middle; a rufous oblong patch on costa beyond middle; a small black discoidal spot; a diffused blackish subterminal mark at middle and band further from termen between vein 4 and inner margin; cilia blackish above tornus. Hind wing crimson with the apical area black from middle of costa to a point at tornus.

Hab. Fr. Guiana, St. Jean Maroni, type † ♂ in U.S. Nat. Mus. *Exp.* 18 millim.

808 *d*. **Talara lepida.** (Plate XXXVI. fig. 28.)

Talara lepida, Schaus, A. M. N. H. (8) vii. p. 365 (1911).

♂. Head and thorax dark brown thickly irrorated with grey-white; pectus fuscous and white; mid and hind femora white, the base of hind tibiæ and the 1st joint of tarsus white; abdomen crimson, the ventral surface banded blackish and pinkish white except at extremity. Fore wing dark brown thickly irrorated with

grey-white scales to beyond middle, the terminal area pale rufous. Hind wing crimson with terminal red-brown band, broad at costa and narrowing to a point at submedian fold. Underside of fore wing fuscous brown to beyond middle, the terminal area rufous; hind wing with the costa brown.

Hab. Costa Rica, Sixola R. (*Schaus*), 1 ♂. *Exp.* 14 millim.

*810 *a*. **Talara alborosea.** (Plate XXXVI. fig. 29.)

Talara alborosea, Roths. Nov. Zool. xx. p. 201 (1913).

♂. Head and thorax white; antennæ brown except towards base; fore legs and mid tibiæ and tarsi brown; abdomen crimson, the ventral surface white. Fore wing silvery white irrorated with a few large black scales; the costal edge black towards base; a small antemedial patch of black irroration above inner margin; an oblique wedge-shaped black-brown patch from cell at origin of vein 2 to terminal part of inner margin; a slight black discoidal point. Hind wing pale crimson. Underside of fore wing with the costal area to beyond middle and the terminal area except at tornus suffused with fuscous brown.

Hab. Venezuela, Valencia, type † ♂ in Coll. Rothschild. *Exp.* 16 millim.

810 *b*. **Talara albipars,** n. sp. (Plate XXXVI. fig. 30.)

♂. Head and thorax black-brown mixed with some whitish; antennæ blackish; tarsi slightly tinged with crimson; abdomen crimson, the ventral surface white tinged with crimson and banded with black. Fore wing brown mixed with some whitish and irrorated with black scales; a large quadrate white patch extending from near base to near middle and from cell to inner margin and another on subterminal area from vein 7 to inner margin. Hind wing crimson, the terminal area fuscous brown, narrowing to a point at vein 1. Underside of fore wing fuscous brown, the inner area and apex whitish.

Hab. Ecuador, Quevedo, 2 ♂ type. *Exp.* 14 millim.

811 *a*. **Talara nigroplagiata.** (Plate XXXVI. fig. 31.)

Talara nigroplagiata, Roths. Nov. Zool. xx. p. 200 (1913).

♂. Head and thorax white irrorated with fuscous brown; antennæ blackish; palpi at tips, fore and mid legs black-brown; abdomen pale crimson. Fore wing white irrorated with large black scales; an oblique triangular black patch irrorated with white scales from cell at origin of vein 2 to terminal part of inner margin; a slight black discoidal spot. Hind wing pale crimson, with a terminal fuscous brown band, broad at costa, narrowing to a point

at vein 1. Underside of fore wing suffused with fuscous except the inner margin; hind wing whitish suffused with crimson.

Ab. 1. Fore wing tinged with brown leaving a white patch on inner area before the blackish patch; hind wing with the terminal band much broader.

Hab. Venezuela, Esteban Valley, Las Quiguas, 1 ♂; Bolivia, Buenavista (*Steinbach*), type † ♂ in Coll. Rothschild. *Exp.* 16 millim.

*811 *b*. **Talara leucophæa.** (Plate XXXVI. fig. 32.)

Talara leucophæa, Dogn. Mém. Soc. Ent. Belg. xix. p. 128 (1912).

♂. Head and thorax dirty white mixed with some blackish; antennæ black; legs mostly dark brown; abdomen crimson. Fore wing chalky white irrorated sparsely with black-brown, the apical area more strongly irrorated with black; cilia silvery grey. Hind wing black-brown, the inner area pale crimson. Underside of fore wing dark brown, the termen whitish, more widely towards apex; hind wing with the apical area whitish.

Hab. Fr. Guiana, Godebert Maroni (*Le Moult*), type † ♂ in Coll. Dognin. *Exp.* 16 millim.

812 *a*. **Talara chionophæa**, n. sp. (Plate XXXVI. fig. 33.)

♀. Head and thorax white mixed with brown; abdomen pale pink, the ventral surface white. Fore wing white irrorated with large dark brown scales, the postmedial area more thickly irrorated, the apical half of terminal area less thickly irrorated; cilia brown, white at tips towards apex. Hind wing brown with a reddish gloss. Underside brown; fore wing with the costa towards apex and the termen white; hind wing with the termen white.

Hab. Brazil, 1 ♀ type. *Exp.* 20 millim.

812 *b*. **Talara violaceogrisea.** (Plate XXXVI. fig. 34.)

Odozana violaceogriseus, Roths. Nov. Zool. xx. p. 197 (1913).

Head and thorax dark red-brown glossed with purple; pectus and legs brownish white, the tibiæ and tarsi dark brown; abdomen dark red-brown, brownish white towards base and on ventral surface. Fore wing dark red-brown glossed with purple. Hind wing red-brown rather paler towards base. Underside of fore wing with the base of costa and inner margin to middle brownish white; hind wing brownish white, the terminal area dark brown narrowing to tornus.

Hab. Br. Honduras, Belize, 1 ♂; Surinam, Maroewym Valley, Aroewarwar Creek (*Klages*), type † ♂ ♀ in Coll. Rothschild; Ecuador, Quevedo, 1 ♀. *Exp.* 18 millim.

*812 *c*. **Talara brunnescens.** (Plate XXXVI. fig. 35.)

Odozana brunnescens, Roths. Nov. Zool. xx. p. 197 (1913).

♂. Head, thorax, and abdomen red-brown, the head with a silvery gloss; antennæ blackish. Fore wing reddish brown with a slight irroration of whitish scales in, beyond, and below end of cell. Hind wing reddish brown.

Hab. Peru, Carabaya, R. Huacamayo (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

*813 *a*. **Talara ignibasis.** (Plate XXXVI. fig. 36.)

Talara ignibasis, Roths. Nov. Zool. xx. p. 201 (1913).

♂. Head and thorax scarlet; antennæ black except towards base; pectus and legs black-brown, the fore coxæ and femora scarlet and the 1st joint of tarsi yellow; abdomen black-brown, the dorsum scarlet towards base, the anal tuft with ochreous mixed. Fore wing scarlet, the area from discal fold to inner margin and from before middle to termen black with a band of leaden grey suffusion on termen, its inner extremity expanding into a rounded patch extending almost to costa, suffused with brilliant blue and with some white scales in cell; an elongate black patch on post-medial part of costa; cilia white. Hind wing fuscous brown with the base scarlet. Underside fuscous black suffused with silvery blue except the base of both wings and a wedge-shaped patch from apex of fore wing which are scarlet.

Hab. Peru, Carabaya, R. Huacamayo (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

*813 *b*. **Talara cara.** (Plate XXXVII. fig. 1.)

Talara cara, Schaus, A. M. N. H. (8) vii. p. 365 (1911).

♂. Head and thorax pale orange-scarlet; palpi black except at base and tips; antennæ black; pectus and legs brown, the tarsi ochreous at base; abdomen black-brown with some pale scarlet at base. Fore wing pale orange-scarlet; the terminal area black-brown, broadly at costa and narrowing to tornus, its inner edge rather diffused and irregular; cilia white at tips on inner half. Hind wing black-brown, the basal area pale orange-scarlet. Underside of fore wing with the costa and terminal half black-brown, the basal half orange-scarlet with oblique outer edge; hind wing pale orange-scarlet to middle.

Hab. Costa Rica, Sixola R. (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 18 millim.

814 *a*. **Talara miniata.** (Plate XXXVII. fig. 2.)

Talara miniata, Roths. Nov. Zool. xx. p. 201 (1913).

Head and thorax scarlet; antennæ black except towards base; pectus and legs fuscous black, the pectus in front, fore coxæ and

femora on inner side scarlet, the tarsi yellow ringed with black; abdomen fuscous black, dorsally scarlet at base. Fore wing scarlet; an elongate black mark on costa beyond middle; a band of brown suffusion on termen from vein 6 to submedian fold. Hind wing fuscous black. Underside fuscous black, the basal area of both wings, the costal area of fore wing to middle, and a wedge-shaped patch from apex scarlet.

Hab. Venezuela, Esteban Valley, Las Quinguas, 2 ♂; Brazil, Amazons, Fonte Boa (*Klages*), type † ♀ in Coll. Rothschild. *Exp.* 18 millim.

814 *b*. **Talara rubida.** (Plate XXXVII. fig. 3.)

Talara rubida, Schaus, A. M. N. H. (8) vii. p. 366 (1911).

♀. Head and thorax deep scarlet; antennæ black except at base; palpi black-brown except at tips; legs dark brown; abdomen black-brown with some scarlet at base. Fore wing deep scarlet with faint fuscous shade beyond the cell. Hind wing black-brown with some scarlet at base. Underside of fore wing dark brown, the basal and costal areas and cilia scarlet; hind wing dark brown with the basal area and costal edge scarlet.

Hab. Costa Rica, Tuis (*Schaus*), 1 ♀. *Exp.* 20 millim.

*815 *a*. **Talara decepta.** (Plate XXXVII. fig. 4.)

Talara decepta, Schaus, Pr. U.S. Nat. Mus. xxix. p. 202 (1905).
Lycomorphodes ænia, Roths. Nov. Zool. xx. p. 200 (1913),

♂. Head and thorax black-brown tinged with blue; vertex of head yellow; 1st joint of tarsi yellowish; abdomen blue-black. Fore wing black-brown suffused with leaden blue; the costa reddish brown to the medial yellowish white band which is interrupted at median nervure; a small yellowish white mark on termen above tornus. Hind wing fuscous brown, slightly paler at base and below the cell.

Hab. Fr. Guiana, St. Jean Maroni, type † ♂ in U.S. Nat. Mus.; Surinam, Maroewym Valley, Aroewarwar Creek (*Klages*), type † ♂ *ænia* in Coll. Rothschild. *Exp.* 20 millim.

*816 *a*. **Talara bicolor.** (Plate XXXVII. fig. 5.)

Odozana bicolor, Roths. Nov. Zool. xx. p. 196 (1913).

♀. Head and thorax dark red-brown; abdomen crimson, the ventral surface dark red-brown. Fore wing dark red-brown. Hind wing dark red-brown, the inner area crimson.

Hab. Colombia, Sta. Marta, Onaca (*Engelke*), type † ♀ in Coll. Rothschild. *Exp.* 22 millim.

* 817 *a*. **Talara diversa.** (Plate XXXVII. fig. 6.)

Talara diversa, Schaus, Pr. U.S. Nat. Mus. xxix. p. 203 (1905).

♂. Head and thorax dull brownish mixed with some whitish; abdomen crimson, the anal tuft fuscous, the ventral surface whitish. Fore wing whitish slightly irrorated with brown; a diffused reddish brown subbasal patch from costa to submedian fold; a diffused rufous patch from middle of costa to submedian fold conjoined to a diffused fuscous patch between vein 4 and tornus; a small fuscous discoidal spot on the rufous patch; a whitish postmedial line excurved from costa to vein 4, then incurved and traversing the fuscous patch, with some diffused rufous beyond it on apical area. Hind wing crimson with fuscous terminal band, broad at costa, narrowing to a point at tornus. Underside of fore wing reddish brown except the inner area.

Hab. Fr. Guiana, St. Jean Maroni, type † ♂ in U.S. Nat. Mus. *Exp.* 16 millim.

*817 *b*. **Talara unimoda.** (Plate XXXVII. fig. 7.)

Talara unimoda, Schaus, Pr. U.S. Nat. Mus. xxix. p. 203 (1905).

♀. Head and thorax dull brown; abdomen crimson with the ventral surface fuscous. Fore wing dull brown; traces of a pale, slightly waved antemedial line, of a dark discoidal point, and of a pale line excurved from costa beyond middle to tornus. Hind wing crimson, the costal and terminal areas fuscous brown, the terminal band ending in a point at tornus and with sinuous inner edge.

Hab. Fr. Guiana, Cayenne, type † ♀ in U.S. Nat. Mus. *Exp.* 16 millim.

*817 *c*. **Talara rugipennis.** (Plate XXXVII. fig. 8.)

Talara rugipennis, Schaus, Pr. U.S. Nat. Mus. xxix. p. 203 (1905).

♀. Head and thorax black-brown; abdomen crimson. Fore wing dull greyish brown irrorated with rough black and whitish scales. Hind wing black-brown.

Hab. Fr. Guiana, St. Jean Maroni, type † ♀ in U.S. Nat. Mus. *Exp.* 16 millim.

820. **Barsinella mirabilis,** insert syn.:—

Barsinella expandens, Roths. Nov. Zool. xx. p. 202 (1913).

Br. Guiana, Bartica, type † ♂ in Coll. Rothschild.

Genus **NEOMULONA**, nov.

Type, *N. torniplaga*.

Proboscis absent; palpi upturned, slender, reaching to about middle of frons; antennæ of male ciliated; hind tibiæ with two pairs of spurs. Fore wing triangular, the apex rounded, the termen evenly curved; veins 3 and 5 from near angle of cell; 6 from upper angle; 7, 8, 9 stalked, 7 from beyond 9; 10, 11 from cell. Hind wing with veins 3, 4 coincident; 5 absent; 6, 7 stalked; 8 from middle of cell.

In key differs from *Chrysochlorosia* in the proboscis being absent, the fore wing with vein 11 free.

*823 *a*. **Neomulona torniplaga.**

Clemensia torniplaga, D. Jones, Trans. Ent. Soc. 1914, p. 9, pl. i. f. 24.

♂. Head and thorax pale yellow; abdomen whitish. Fore wing very pale yellow; a slight punctiform dark antemedial line, angled outwards at median nervure and with faint rufous tinge before it towards costa; an indistinct rufous medial line excurved at middle and with the area beyond it slightly tinged with rufous; a black

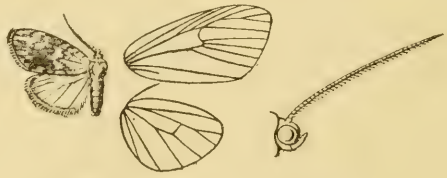

Fig. 222.—*Neomulona torniplaga*, ♂. ½.

discoidal point; an oblique patch of diffused fuscous scales from below end of cell to tornus; traces of a punctiform dark post-medial line, oblique to vein 2, then incurved. Hind wing white.

Hab. Brazil, São Paulo (*D. Jones*), type † ♂ in Coll. D. Jones. *Exp.* 16 millim.

828 *a*. **Cincia nephelistis.**

Cincia nephelistis, Hmpsn. A. M. N. H. (7) xv. p. 436 (1905).

Antennæ of male bipectinate with moderate branches; hind wing with veins 6, 7 from cell.

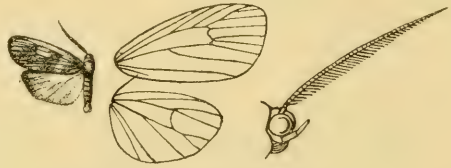

Fig. 223.—*Cincia nephelistis*, ♂. ½.

Head and thorax pale pinkish mixed with black; palpi black;

vertex of head and metathorax with black patches; antennæ yellowish white with the basal joint black in front; abdomen pink suffused with fuscous, the base whitish. Fore wing pale pink thickly irrorated and in places suffused with black; the veins black; the costal area pinker. Hind wing of male white, the costal and apical areas suffused with fuscous, of female wholly suffused with fuscous.

Hab. CUBA, Santiago, 1 ♀, Mutijas, (*Schaus*), 1 ♂ type. *Exp.* ♂ 24, ♀ 26 millim.

*828 *b*. Cincia muelleri.

Hypoprepia muelleri, Dyar, J. N.Y. Ent. Soc. xv. p. 51 (1907).

Antennæ of male serrate.

♂. Head and thorax fuscous brown, the shoulders with small pale crimson patches; abdomen fuscous brown with some pale crimson hairs at base of dorsum and crimson patch at extremity. Fore wing fuscous brown, rather thinly scaled, a small pale crimson patch at base of inner area. Hind wing whitish tinged

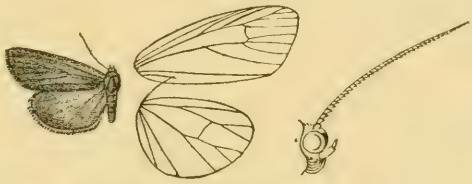

Fig. 224.—*Cincia muelleri*, ♂. ½.

with pale crimson except on terminal area which is suffused with brown.

Hab. MEXICO, Mexico City (*Müller*), type † ♂ in U.S. Nat. Mus. *Exp.* 30 millim.

Genus **MAHENSIA**.

Type.

Mahensia, Fryer, Trans. Linn. Soc., Zool. xv. p. 5 (1912)... *seychellarum*.

Proboscis fully developed; palpi upturned and reaching to vertex of head, slender; antennæ of male ciliated; tibiæ with the spurs long. Fore wing with the apex rounded, the termen evenly curved; vein 2 from beyond middle of cell, curved at base; 3, 4 stalked; 5 absent; 6, 7 stalked; 8, 9 absent; 10, 11 from cell; male with a large patch of rufous androconia in end of cell. Hind wing with vein 2 from well beyond middle of cell; 3, 4 coincident, 5 absent; the terminal part of subcostal nervure arched and the discocellulars short; vein 7 from well before end of cell; 8 from middle of cell; male with a patch of rufous androconia in end of cell on upper side.

In key differs from *Labobasis*, in the fore wing having veins 6, 7 stalked, 8, 9 absent; hind wing with veins 2 and 7 from well before angles of cell.

829 *a*. Mahensia seychellarum.

Mahensia seychellarum, Fryer, Trans. Linn. Soc., Zool. xv. p. 5, pl. i. ff. 2, 3 (1912).

♂. Head and thorax pale grey; antennæ brownish; abdomen grey

dorsally suffused with fuscous brown. Fore wing grey-white; the costa brownish towards base; a subbasal black spot below the cell; a diffused blackish antemedial mark on costa and spot on vein 1; a black spot in lower part of cell towards extremity and spot at upper angle; a diffused blackish patch on costa just beyond the cell, its lower extremity angled outwards and a bar from vein 2 to

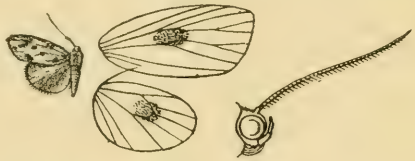

Fig. 225.—*Mahensia seychellarum*, ♂. ½.

inner margin; diffused brownish subterminal spots below apex and at vein 3. Hind wing glossy reddish brown, the patch of androconia in end of cell rufous. Underside reddish brown, the patch of androconia in end of cell of fore wing rufous.

Hab. SEYCHELLES, Silhouette (*Fryer*), 1 ♂ type. *Exp.* 20 millim.

Genus **EUCLEMENSIA**, nov.

Type, *E. umbrata*.

Proboscis fully developed; palpi upturned to about vertex of head, slender; antennæ of male with bristles and cilia; hind tibiæ with two pairs of spurs. Fore wing rather narrow, the apex somewhat produced and the termen oblique; vein 3 from before angle of cell; 4, 5 from angle; 6 from upper angle; 7, 8, 9 stalked, 7 from beyond 9; 10, 11 stalked. Hind wing with veins 3, 4 coincident; 5 from angle of cell; 6, 7 stalked; 8 from middle of cell.

In key differs from *Siccia* in the fore wing having veins 10, 11 stalked.

*829 *b*. **Euclemensia umbrata.**

Euclemensia umbrata, Dogn. Hét. Nouv. Am. Sud, vii. p. 14 (1914).

♂. Head white, the palpi and antennæ brown; thorax white

Fig. 226.—*Euclemensia umbrata*, ♂. ½.

tinged with red-brown; abdomen white. Fore wing white; some reddish brown suffusion on basal costal area; an indistinct brown

antemedial line, angled outwards at vein 1 and with some red-brown suffusion beyond it except towards inner margin; an indistinct waved brown medial line; the outer part of medial area suffused with red-brown and irrorated with blackish and with a diffused black discoidal mark; postmedial line dark brown, angled outwards below vein 7 and at vein 4, then oblique and waved; a rather diffused sinuous brown subterminal line, forming a patch at costa and bent outwards to tornus; the terminal area suffused with red-brown except towards tornus. Hind wing white; the underside with the apical area tinged with red-brown and with some red-brown at extremity of vein 1.

Hab. Colombia, Quindin, Rio Toche, type † ♂ in Coll. Dognin. *Exp.* 26 millim.

830 *a*. **Siccia atriguttata.** (Plate XXXVII. fig. 9.)

Siccia atriguttata, Hmpsn. A. M. N. H. (8) iv. p. 356 (1909).

Head and thorax white; palpi black; frons black at sides; prothorax with black spots; fore legs fuscous; abdomen brownish white. Fore wing white; subbasal black spots below costa and cell; antemedial black spots on costa, in and below cell, on vein 1, and on inner margin further from base; round black spots in middle of cell and on discocellulars; a black spot on middle of costa with slight oblique line from it to the discoidal spot, then incurved below the cell and with two black spots in submedian interspace; postmedial line black, maculate, bent outwards below costa, angled outwards at vein 6, incurved at discal fold and excurved at median nervules, then strongly incurved; a black lunule on costa before apex; the termen with small black spots at apex, middle, and below vein 2. Hind wing white; a slight discoidal point; the underside with the costal area slightly tinged with brown.

Hab. Angola, Bihé, 1 ♂, 1 ♀ type. *Exp.* ♂ 24, ♀ 26 millim.

830 *b*. **Siccia melanospila.** (Plate XXXVII. fig. 10.)

Siccia melanospila, Hmpsn. A. M. N. H. (8) viii. p. 404 (1911).

Head, thorax, and abdomen grey tinged with pale red-brown; palpi black; fore legs and mid tibiæ and tarsi blackish. Fore wing brownish grey; small obliquely-placed subbasal black spots on costa and below the cell; antemedial black spots on costa and below the cell; medial black spots on costa, in cell, and on inner margin, and a discoidal spot; traces of a punctiform postmedial line with black spots on costa, in discoidal and submedian folds and on inner margin, the line oblique from costa to discal fold, then inwardly oblique to submedian fold and bent outwards to inner margin; a spot on costa towards apex; some points on apical part of costa and terminal spots at discal and submedian folds. Hind wing

whitish suffused with brown; the underside with the costal area browner, a brown discoidal spot.

Hab. Br. E. Africa, Kikuyu Escarpment (*Doherty*), 3 ♂, 1 ♀ type. *Exp.* 24 millim.

833 *a*. **Siccia microsticta**, n. sp.

Antennæ of male with the shaft dilated near base, then serrate and fasciculate; hind wing with veins 3 and 5 stalked.

♂. Head, thorax, and abdomen chalky white; antennæ yellowish towards tips; frons yellowish; palpi blackish; legs tinged with yellow and the tibiæ and tarsi streaked with fuscous in front; abdomen ventrally tinged with yellowish. Fore wing chalky

Fig. 227.—*Siccia microsticta*, ♂. ½.

white; the costal edge black towards base; subbasal and antemedial black points in submedian fold; black points in middle of cell and just beyond the discocellulars; a postmedial black point in submedian fold; a small terminal black spot at vein 4 and a point at submedian fold. Hind wing chalky white. Underside of fore wing suffused with fuscous brown except the inner area; hind wing faintly tinged with brown and with fuscous discoidal spot.

Hab. Gold Coast, Bibianaha (*Spurrell*), 1 ♂ type. *Exp.* 16 millim.

833 *b*. **Siccia gypsia**, n. sp.

Antennæ of male ciliated; hind wing with veins 3 and 5 stalked.

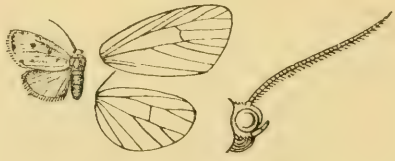

Fig. 228.—*Siccia gypsia*, ♂. ½.

Head and thorax chalky white; antennæ yellowish; palpi and lower part of frons black; pectus and legs yellowish, the fore legs and mid tibiæ and tarsi black in front; abdomen yellowish. Fore

wing chalky white; the costal edge black towards base; subbasal and antemedial black points in submedian fold; round black spots in middle of cell and just beyond the discocellulars; postmedial line represented by a more or less developed series of black scales and points, bent outwards below costa, slightly incurved at discal fold and strongly below vein 4, the spots below vein 2 and at inner margin sometimes with other spots before them; a black spot on costa towards apex; the termen with some black points towards apex and spots at vein 4 and submedian fold. Hind wing chalky white. Underside tinged with ochreous; fore wing with the costal half suffused with fuscous brown to beyond middle; hind wing with the costal area tinged with brown, a fuscous discoidal spot.

Hab. Gold Coast, Bibianaha (*Spurrell*), 1 ♂, 1 ♀, Kumasi (*Sanders*), 1 ♂, 2 ♀ type. *Exp.* 20–22 millim.

833 *c*. **Siccia cretata**, n. sp. (Plate XXXVII. fig. 11.)

♀. Head and thorax chalky white; antennæ brownish except at base; palpi and lower part of frons black; pectus and legs brown, the fore and mid tibiæ and tarsi blackish; abdomen white tinged with brown, the anal tuft of male ochreous, of female brownish. Fore wing white; the costal edge black towards base; a subbasal black spot below the cell; antemedial black spots on costa and below the cell; medial spots on costa, in cell, and on inner margin; a round discoidal spot; a postmedial series of black spots, the spots at costa and discal and submedian folds larger, the series oblique to vein 6 and strongly incurved below vein 4, sometimes with a bar before it below vein 2; a subterminal black spot on costa; terminal black spots below veins 5 and 2 and slight points towards apex. Hind wing white, more or less tinged with pale brown. Underside of both wings suffused with brown; hind wing with blackish discoidal spot.

Hab. Gold Coast, Bibianaha (*Spurrell*), 1 ♀ type; Uganda, S.E. Buddu, Toro Forest (*Neave*), 1 ♀. *Exp.* 20–24 millim.

837. **Siccia tau.**

Snell. Tijd. v. Ent. xlvii. p. 155, pl. 11. f. 3.

841 *a*. **Siccia stictica**, n. sp. (Plate XXXVII. fig. 12.)

♀. Head, thorax, and abdomen ochreous white; pectus, legs, and ventral surface of abdomen tinged with red-brown, the anal tuft large and tinged with brown. Fore wing ochreous white slightly irrorated with fuscous; a small antemedial black spot in submedian fold and small spots in middle of cell and on discocellulars; minute black spots on termen at discal and submedian folds. Hind wing creamy white. Underside of fore wing faintly tinged with red-brown.

Hab. Gold Coast, Bibianaha (*Spurrell*), 1 ♀ type. *Exp.* 18 millim.

843 *a*. **Siccia conformis**, n. sp. (Plate XXXVII. fig. 13.)

♂. Head, thorax, and abdomen pale brownish grey; antennæ brown; palpi black except at base; fore and mid tibiæ and tarsi black ringed with whitish. Fore wing white with an ochreous brown tinge; obliquely placed black subbasal spots on costa and below the cell; an antemedial series of five black spots, the spots on costa and below the cell larger, the series excurved to submedian fold, then incurved; a black spot in middle of cell with larger spot above it on costa; a discoidal spot; a sinuous medial line from vein 2 near its origin to inner margin; postmedial line black with small spot at costa, bent outwards below costa, incurved at discal fold, excurved at middle, then strongly incurved and again excurved to inner margin; a subterminal black spot on costa followed by a slight sinuous shade formed by black scales; a terminal series of small black spots. Hind wing white. Underside of fore wing suffused with fuscous; hind wing with the costal area tinged with brown, a blackish discoidal point.

♀. Hind wing fuscous brown.

Hab. S. Nigeria, Sapele (*Sampson*), 1 ♂; N. Nigeria, Minna (*Macfie*), 1 ♂ type; Br. E. Africa, Teita (*Jackson*), 1 ♀. *Exp.* 16 millim.

845 *a*. **Siccia fumeola**, n. sp. (Plate XXXVII. fig. 14.)

♂. Head and thorax dark brown mixed with brownish grey; abdomen dark brown. Fore wing greyish ochreous mixed with dark brown; obliquely placed dark brown subbasal spots on costa and in cell; an antemedial spot on costa and indistinct diffused line, oblique below the cell; a dark point in middle of cell and slight discoidal spot; an indistinct diffused medial line excurved to lower angle of cell; an indistinct postmedial line, oblique towards costa and with dark spot at discal fold; an indistinct maculate dark subterminal line and terminal series of small spots. Hind wing dark reddish brown.

Hab. Formosa, Kanshirei (*Wileman*), 1 ♂ type. *Exp.* 14 millim.

*846 *a*. **Siccia pyralina**. (Plate XXXVII. fig. 15.)

Chionæma pyralina, Roths. Nov. Zool. xx. p. 192 (1913).

♂. Head and thorax red-brown; palpi and antennæ dark brown; pectus and legs dark brown, the tibiæ at extremities and tarsi slightly ringed with whitish; abdomen grey-brown, the anal tuft brownish white, the ventral surface brownish white towards base. Fore wing grey-brown suffused with red-brown and irrorated with blackish, the basal area suffused with deep chocolate-brown leaving the base of inner margin pale grey-brown; a subbasal black-brown striga from costa; antemedial line almost medial, black-brown,

waved, expanding into a spot at costa; a minute white discoidal spot defined by black and with black streak from it to the postmedial line, which is black-brown, expanding into a spot at costa, bent outwards at vein 6, slightly angled inwards at discal fold and incurved below vein 4; a dark subterminal shade; a series of minute black-brown spots on apical part of costa and on termen. Hind wing red-brown. Underside of fore wing reddish brown.

Hab. Dutch N. Guinea, Up. Setekwa R., Snow Mts. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

*846 *b*. **Siccia fasciata.** (Plate XXXVII. fig. 16.)

Chionæma pyralina, fasciata, Roths. Nov. Zool. xx. p. 193 (1913).

♀. Head and thorax red-brown with a bluish gloss; antennæ slightly ringed with white towards base; pectus, legs, and abdomen reddish brown, the tarsi slightly ringed with whitish. Fore wing reddish brown glossed with silvery blue, the basal area suffused with chocolate-brown except towards costa; a black-brown subbasal striga from costa; antemedial line dark chocolate-brown, almost medial, oblique, sinuous; a narrow white discoidal lunule defined by black-brown; postmedial line dark chocolate-brown defined on outer side by silvery blue, sinuous, bent outwards at vein 6, slightly angled inwards at discal fold, incurved below vein 4 and bent outwards to inner margin; a chocolate-brown subterminal band, expanding towards costa, its outer edge angled inwards at discal fold and excurved at middle; a chocolate-brown terminal line and a dark line near base of cilia. Hind wing reddish brown. Underside of fore wing uniform greyish brown.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 20 millim.

849 *a*. **Eutelesia phæochroa**, n. sp. (Plate XXXVII. fig. 17.)

♂. Head and thorax pale glossy reddish brown; antennæ black-brown; pectus and legs ochreous, the fore legs fuscous; abdomen dark red-brown. Fore wing dark red-brown, the basal area suffused with reddish ochreous scales; the costal edge reddish ochreous at and beyond middle and towards apex; cilia reddish ochreous at tips above and below middle. Hind wing dark red-brown, the costal area reddish ochreous to beyond middle.

Hab. Colombia, Sierra del Libano (*H. H. Smith*), 1 ♂ type. *Exp.* 18 millim.

*851 *a*. **Clemensia fuscipes.**

Vanessodes fuscipes, Grote, Can. Ent. xv. p. 86 (1883); Kirby, Cat. Het. p. 237.

♂. Palpi oblique; head, thorax, and abdomen greyish fuscous; wings semihyaline fuscous grey irrorated with dark scales.

Hab. U.S.A., Arizona. *Exp.* 22 millim. This species is unknown to me.

*851 *b*. Clemensia acropera.

Clemensia acropera, D. Jones, Trans. Ent. Soc. 1908, p. 146.

Fore wing with the costa highly arched, the apex produced, the termen slightly angled at middle.

♂. Head and thorax grey-brown, the antennæ, vertex of head, tegulæ and metathorax paler; palpi black, pale in front; pectus and legs ochreous white, the fore legs and mid tibiæ tinged with fuscous; abdomen whitish with slight brown dorsal bands on medial segments, the ventral surface tinged with brown. Fore

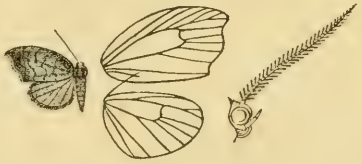

Fig. 229.—*Clemensia acropera*, ♂. ½.

wing white slightly tinged with brown, the base, costal, and terminal areas fuscous brown, expanding broadly at apex and narrowing to tornus, the brown at base bounded by an irregular oblique fuscous shade; irregularly waved brown antemedial, medial, and postmedial lines, the 2nd oblique towards costa and strongly bent outwards below median nervure, the 3rd oblique towards costa and incurved below vein 2; a small oblique blackish discoidal spot; cilia pale at tips except at apex, middle, and tornus where there are blackish patches. Hind wing ochreous white; the underside with the costa tinged with red-brown.

Hab. Brazil, Castro Paraña, type † ♂ in Coll. D. Jones. *Exp.* 20 millim.

852 *a*. Clemensia cincinnata.

Clemensia cincinnata, Schaus, A. M. N. H. (8) vii. p. 367 (1911).

Fore wing of male with the median nervure curved upwards and the cell narrow, a patch of rough brown androconia beyond the tuft of hair on underside; hind wing with the cell clothed with closely appressed yellow androconia on upperside.

♂. Head and thorax dark brown mixed with white; palpi black; antennæ brown; pectus and legs whitish suffused with brown, the fore tibiæ and tarsi banded with black; abdomen brown. Fore wing white thickly irrorated with black-brown, the terminal area less strongly irrorated, the medial area tinged with brown in submedian interspace; some slight black marks on base of costa; an

obliquely curved black antemedial band, with small black spots beyond it on costal half and vein 1; a small black spot in middle of cell, black discoidal bar, spots at middle of costa, below the cell and two on vein 1; an obscure dentate postmedial line; a subterminal black patch on costa and slight marks before middle of termen; a terminal series of small black spots; the cilia with blackish marks at apex and middle. Hind wing fuscous brown, the costal area ochreous white to median nervure; cilia white at

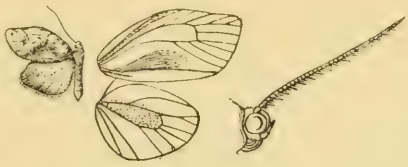

Fig. 230.—*Clemensia cincinnata*, ♂. ½.

tips. Underside of fore wing brown with some whitish below middle of cell; hind wing whitish suffused in parts with brown.

♀. Abdomen with the anal tuft white; fore wing white and black without brown suffusion, a waved medial line, the dentate postmedial line distinct, also the marks before middle of termen; hind wing wholly brown.

Hab. Costa Rica, Juan Vinas (*Schaus*), 1 ♂. *Exp.* ♂ 22, ♀ 20 millim. Type † ♂, ♀ in U.S. Nat. Mus.

*852 *b*. **Clemensia alembis.** (Plate XXXVII. fig. 18.)

Clemensia alembis, Dyar, Pr. U.S. Nat. Mus. xxxviii. p. 234 (1910).

♂. Head, thorax, and abdomen white suffused with brown. Fore wing grey-white irrorated and in parts suffused with brown; a series of dark subbasal points; a curved black antemedial band defined on inner side by white, followed by a maculate line; a small black spot in middle of cell and elliptical discoidal spot; a curved maculate blackish medial line; postmedial line blackish, somewhat dentate, angled outwards at veins 6 and 4; a subterminal series of blackish marks from costa to vein 4, bent inwards to costa, and an oblique mark at tornus; the costa towards apex and termen with series of small black spots. Hind wing whitish suffused with fuscous except the costal area to beyond middle, and the cell which is clothed with pale yellow closely appressed androconia. Underside of fore wing with the tuft of hair yellow followed by a patch of rough rufous androconia.

Hab. Mexico, Cordoba (*Knab*, *Schaus*). *Exp.* 21 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

*852 *c*. Clemensia leisova. (Plate XXXVII. fig. 19.)

Clemensia leisova, Dyar, Pr. U.S. Nat. Mus. xxxviii. p. 233 (1910).

♂. Head, thorax, and abdomen white tinged with brown. Fore wing white tinged and irrorated with brown; some red-brown suffusion in submedian interspace from base to the postmedial line; an indistinct double maculate antemedial line; a black point in middle of cell and discoidal bar; medial line blackish, slightly waved, oblique to discal fold, then incurved; postmedial line blackish, maculate, oblique to discal fold, then incurved; a subterminal blackish patch on costa, traces of a subterminal line at middle and an oblique brown patch to tornus; the costa towards apex and termen with series of small black spots. Hind wing white, the cell clothed with pale yellow closely appressed androconia, the termen suffused with brown except towards tornus. Underside of fore wing with the tuft of hair brown followed by a patch of rough brown androconia.

Hab. Mexico, Jalapa (*Schaus*). *Exp.* 22 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

852 *d*. Clemensia leopardina. (Plate XXXVII. fig. 20.)

Clemensia leopardina, Schaus, A. M. N. H. (8) vii. p. 367 (1911).

♂. Head, thorax, and abdomen grey suffused with fuscous; palpi black. Fore wing grey-white; an orange-fulvous streak in medial part of submedian fold; subbasal black spots on costa and below the cell; an antemedial series of five black spots, incurved below the costa, then excurved and with black spots before it in submedian fold and on vein 1; black spots in middle of cell and on discocellulars; a medial series of six black spots, incurved below submedian fold; a postmedial series of ten black spots, oblique to vein 6 and incurved below vein 4; subterminal black patches on costal area, at middle and on inner area; a terminal series of small black spots; cilia with black marks at apex and middle. Hind wing white tinged in parts with brown, the terminal area suffused with brown; cilia white at tips; the underside whitish, the costal area suffused with red-brown, a brown discoidal spot.

Hab. Costa Rica, Sixola R. (*Schaus*), 1 ♂. *Exp.* 24 millim.

*852 *e*. Clemensia reticulata. (Plate XXXVII. fig. 21.)

Clemensia reticulata, Roths. Nov. Zool. xx. p. 292 (1913).

♂. Head and thorax white, the back of head with small black spot, the pro-, meso-, and metathorax with paired black spots; antennæ tinged with fuscous; palpi black except at base; pectus and legs tinged with fuscous; abdomen tinged with fuscous except at base, the anal tuft and ventral surface ochreous. Fore wing

white; a black point at base of costa; subbasal black spots on costa and below the cell, with a downcurved streak from lower edge of the latter to base of median nervure and a short oblique streak above base of inner margin; an antemedial series of six small black spots, the spot on inner margin further from base; the medial area with black streaks on the veins and in discal and submedian folds; a small black spot in middle of cell and rather lunulate discoidal spot; medial line black, forming small spots at costa and inner margin, somewhat excurved to median nervure and angled inwards in submedian fold; postmedial line black, oblique to vein 7, then somewhat incurved, angled outwards at vein 4, then very oblique to submedian fold where it is acutely angled inwards and excurved to inner margin; subterminal black spots on costa, at discal fold, and an oblique spot at tornus; a terminal series of black points, those at apex and middle with the black extending on to the cilia. Hind wing white, the terminal area tinged with fuscous, narrowing to tornus; the inner margin tinged with brown. Underside of fore wing suffused with fuscous except the inner area, the costa with alternating fuscous and white marks except towards base; hind wing with the costal area tinged with fuscous, and with fuscous discoidal spot.

Hab. Peru, Carabaya, R. Huacamayo (*Ockenden*), type † ♂ in Coll. Rothschild, R. Suambari, La Oroya, Tinguri. *Exp.* 18 millim.

853. Clemensia albata.

Larva. Dyar, Pr. U.S. Nat. Mus. xxvii. p. 793 (1904).

853*a*. Clemensia urucata. (Plate XXXVII. fig. 22.)

Clemensia urucata, Dogn. Ann. Soc. Ent. Belg. xlvi. p. 230 (1902).

♂. White; head and thorax irrorated with fuscous, the prothorax with black patch; tibiæ and tarsi banded with black; abdomen banded with black, the ventral surface tinged with brown. Fore wing slightly irrorated with black; the lower part of cell, interspaces beyond lower angle, and submedian interspace to postmedial line tinged with pale red-brown; three black points on basal part of costa; a broad black band with rather sinuous edges from below costa to inner margin before the excurved antemedial line, which is incurved between submedian fold and vein 1, and with black points at costa and veins; a black point in middle of cell; a medial brownish line with black points at costa and on the veins, oblique from costa to median nervure, then slightly sinuous; a black discoidal lunule; a brownish postmedial sinuous line with black points at costa and veins, oblique from costa to vein 6, angled outwards at vein 4, then strongly incurved, a maculate black band beyond it expanding into patches with some white scales on them below costa, at middle, and above inner margin; a terminal series of black striæ, some black on cilia at apex and

tornus and a patch on middle of termen and cilia. Hind wing white with a slight ochreous tinge; a fuscous discoidal point and rather diffused irregular subterminal band; a fuscous line on apical part of termen; the underside with some brown on costa and postmedial line from costa to vein 5.

Hab. Costa Rica, San José, 3000′, type † ♂ in Coll. Dognin, Juan Vinas (*Schaus*), 1 ♂. *Exp.* 24 millim.

*853 *b*. **Clemensia maculata.** (Plate XXXVII. fig. 22.)

Disoidemata maculata, Roths. Nov. Zool. xix. p. 226 (1912).

♀. Head and thorax whitish suffused with cupreous brown; abdomen fuscous brown, the anal tuft and ventral surface pale brown. Fore wing white tinged and irrorated with brown; a broad black-brown band glossed with silvery blue and with sinuous edges before the slight brown antemedial line, which is excurved to submedian fold and incurved at vein 1; a round black-brown discoidal spot glossed with silvery blue; postmedial line slight, brown, excurved below costa and at middle and incurved at discal fold and below vein 4, a black-brown spot glossed with silvery blue beyond it at discal fold and a black-brown band with sinuous edges from vein 4 to inner margin; an oblique black-brown patch from vein 7 to termen at vein 4 and a black-brown terminal line; cilia with black-brown patch at middle and line near tips. Hind wing fuscous brown. Underside of both wings fuscous brown.

Hab. Peru, Carabaya, R. Huacamayo (*Ockenden*), type † ♀ in Coll. Rothschild. *Exp.* 14 millim.

853 *c*. **Clemensia lactea**, Stretch, trans. from *Illice*, no. 792.

*853 *d*. **Clemensia brunneomedia.**

Clemensia brunneomedia, Schaus, Pr. U.S. Nat. Mus. xxix. p. 204 (1905).

Fore wing of male with the costa slightly lobed at middle, fringed with rough hair and with patch of rough hair below it on

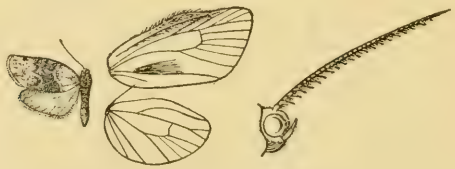

Fig. 231.—*Clemensia brunneomedia*, ♂. ½.

upperside; a fold and fringe of hair below costa, and pencil of long hair below the cell on underside; hind wing with the costa lobed at middle.

♂. Head and thorax brown mixed with greyish; fore tibiæ and tarsi blackish, the latter with pale rings; abdomen greyish suffused with fuscous, the anal tuft pale rufous. Fore wing greyish tinged with pale rufous and irrorated with fuscous; a slight dark subbasal spot on costa; antemedial line indistinct, curved, minutely waved, the area beyond it rufous to the postmedial line and on costa to near apex; postmedial line sinuous, oblique from costa to vein 4, then strongly retracted to below end of cell, slightly defined by whitish on outer side and excurved to inner margin, connected with antemedial line by slight diffused black streaks in submedian fold and on vein 1; the costa towards apex and termen with dark points. Hind wing whitish tinged with fuscous; a faint discoidal point.

Hab. Costa Rica, type † ♂ in U.S. Nat. Mus. *Exp.* 20 millim.

854 *a*. Clemensia abnormis. (Plate XXXVII. fig. 24.)

Clemensia abnormis, Schaus, Pr. U.S. Nat. Mus. xxix. p. 205 (1905).

♂. Head and thorax whitish suffused with yellow; tibiæ tinged with fuscous; abdomen ochreous white, dorsally tinged with fuscous towards extremity, the anal tuft ochreous. Fore wing ochreous white suffused with chrome-yellow except the base, costal and apical areas down to vein 2; antemedial line represented by some black scales, oblique below the cell; some fuscous suffusion on outer edge of the yellow area, the inner edge of the apical area being defined by a paler line. Hind wing ochreous white with a large patch of fuscous suffusion on terminal area not extending to apex or tornus. Underside of fore wing with semicircular black patch below middle of costa connected with a slight fuscous patch beyond lower angle of cell.

Hab. Fr. Guiana, St. Jean Maroni (*Schaus*), 1 ♂, type † ♂ in U.S. Nat. Mus. *Exp.* 18 millim.

*854 *b*. Clemensia subleis.

Clemensia subleis, Schaus, Pr. U.S. Nat. Mus. xxix. p. 204 (1905).

Fore wing of male with patch of brown androconia on underside

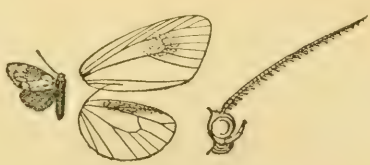

Fig. 232.—*Clemensia subleis*, ♂ ½.

in and beyond end of cell, hind wing with patch of black androconia below costa on upperside.

♂. Head, thorax, and abdomen pale grey slightly tinged with brown; palpi blackish; tibiæ and tarsi with some black. Fore wing grey-white slightly tinged with brown, chiefly on medial area; subbasal black spots below costa and cell, the latter with another beyond it; an antemedial black spot on costa and traces of a curved series of points; a round discoidal spot just before the indistinct, slightly curved, minutely dentate postmedial line; a subterminal spot on costa, another at vein 6 and diffused mark above tornus; the termen with slight points at apex and more distinct mark at middle. Hind wing pale fuscous.

Hab. Fr. Guiana, St. Jean Maroni, type † ♂ in U.S. Nat. Mus. *Exp.* 16 millim.

854 *c*. Clemensia inleis.

Clemensia inleis, Schaus, Pr. U.S. Nat. Mus. xxix. p. 204 (1905).

Fore wing with vein 7 absent.

♂. Head and thorax pale rufous; abdomen rufous dorsally tinged with fuscous. Fore wing pale rufous, with slight darker irroration; traces of a medial series of points; a small discoidal spot with another above it on costa and four points towards inner

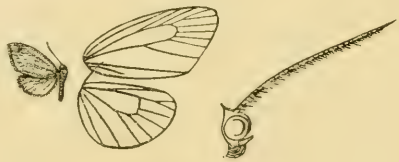

Fig. 233.—*Clemensia inleis*, ♂. ½.

margin; some ill-defined dark marks on costa towards apex and on cilia. Hind wing yellowish white; a slight discoidal spot; the apex slightly tinged with rufous.

Hab. Brazil, Castro Paraña, 1 ♂, type † ♂ in U.S. Nat. Mus. *Exp.* 16 millim.

*856 *a*. Clemensia distincta. (Plate XXXVII. fig. 25.)

Clemensia distincta, Schaus, Pr. U.S. Nat. Mus. xxix. p. 204 (1905).

♀. Fuscous tinged with leaden blue. Fore wing with indistinct waved antemedial olive-brown line with diffused band before it except at costa; a diffused waved medial line, oblique from costa to median nervure, then incurved; a small discoidal spot; postmedial line unusually near termen, indistinct, punctiform, defined by some whitish on outer side, excurved from costa to vein 4, then incurved; the terminal area slightly darker with ill-defined punctiform whitish line just before termen, bent outwards to tornus; the

termen rather strongly excurved at middle with blackish patches on cilia at apex and middle. Hind wing fuscous brown tinged with black.

Hab. Trinidad, type † ♀ in U.S. Nat. Mus. *Exp.* 20 millim.

*859 *a*. Clemensia nubila.

Clemensia nubila, D. Jones, Trans. Ent. Soc. 1914, p. 10, pl. i. f. 25.

♂. Head and thorax ochreous white, the latter with some black scales; antennæ and palpi tinged with red-brown; fore legs suffused with dark brown; abdomen whitish. Fore wing ochreous tinged with rufous and irrorated with black especially on antemedial and terminal areas; a curved black subbasal line followed by a black shade, then a series of black points; an indistinct strongly waved blackish medial line; a slight blackish discoidal striga and point at lower angle of cell; a postmedial series of black points, oblique to vein 6, then inwardly oblique; a maculate blackish subterminal shade, excurved below costa and bent outwards to tornus; a terminal series of blackish striæ. Hind wing white, the inner margin and termen tinged with red-brown; the underside with the costal area tinged with red-brown, a slight discoidal bar and traces of curved subterminal line.

Hab. Brazil, São Paulo (*D. Jones*), type † ♂ in Coll. D. Jones. *Exp.* 18 millim.

*860 *a*. Clemensia mesomma. (Plate XXXVII. fig. 26.)

Clemensia mesomma, Dogn. Hét. Nouv. Am. Sud, vii. p. 14 (1914).

♂. Head and thorax grey-white suffused with red-brown; palpi, antennæ, and legs dark brown, the tarsi with pale rings; abdomen grey. Fore wing grey-white tinged with red-brown and irrorated with some dark brown scales; a curved black-brown subbasal line from costa to submedian fold; a sinuous black-brown antemedial line; a minute black point in middle of cell and black discoidal spot; medial line black-brown, oblique to above the discoidal spot, then angled inwards before it, oblique and reduced to points from lower angle of cell to inner margin; an obliquely curved postmedial black bar from costa, then a series of points, oblique below vein 4; a black-brown patch on costa towards apex, a patch before middle of termen and slight shade towards tornus; a terminal series of small black spots. Hind wing grey-white; the underside with the costal area and termen suffused with red-brown, a small black discoidal spot, diffused curved brown postmedial line, and terminal series of striæ.

Hab. Colombia, Cordoba, Monte Tolima (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 28 millim.

*860 *b*. **Clemensia mucida.** (Plate XXXVII. fig. 27.)

Clemensia mucida, Schaus, A. M. N. H. (8) vii. p. 366 (1911).

♂. Head, thorax, and abdomen whitish suffused with brown; palpi black. Fore wing white irrorated with dark brown, the outer half of medial area suffused with reddish brown; the costa brown; a small subbasal black spot on costa and striga below the cell; a rather oblique and slightly sinuous antemedial black line, broken up into spots on inner area; an oblique black discoidal striga; postmedial line blackish, dentate, oblique from costa to vein 6 and strongly incurved below vein 3, a blackish patch beyond it on inner area; a subterminal blackish patch on costa and brown patch at middle; a terminal series of small blackish spots; cilia with brown marks at apex and middle. Hind wing brown. Underside of fore wing brown; hind wing with slight discoidal spot.

Hab. Costa Rica, Juan Vinas (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 16 millim.

*860 *c*. **Clemensia leucogramma.** (Plate XXXVII. fig. 28.)

Clemensia leucogramma, Dogn. Hét. Nouv. Am. Sud, vii. p. 15 (1914).

♂. Head and thorax white, the dorsum of thorax suffused with rufous; antennæ rufous; palpi black-brown; pectus and legs rufous, the fore legs black-brown in front; abdomen rufous, dorsally suffused with fuscous. Fore wing rufous; a red-brown subbasal striga defined on outer side by white; antemedial line red-brown defined on inner side by white and with blackish points at the veins, irregularly waved, oblique to submedian fold, then inwardly oblique; an indistinct red-brown medial line, oblique towards costa, excurved in cell, then inwardly oblique and sinuous; a black discoidal point; postmedial line red-brown defined on outer side by white and with blackish points at the veins, obliquely downcurved to vein 6, slightly angled outwards at veins 4, 3, then oblique and minutely dentate; a series of white striæ just before termen, forming a short streak at vein 6 and bent outwards to tornus. Hind wing whitish suffused with rufous, especially at termen; the underside with indistinct red-brown postmedial line with dark point at discal fold and diffused subterminal line.

Hab. Panama, Lino (*Fassl*), type † ♂ in Coll. Dognin. *Exp.* 16 millim.

860 *d*. **Clemensia lacteata**, n. n. (Plate XXXVII. fig. 29.)

Disoidemata lactea, Roths. Nov. Zool. xix. p. 225 (1912), nec Stretch.

♂. Head, thorax, and abdomen white, the frons above, dorsum of thorax, and abdomen tinged with brown; palpi black; pectus

and legs tinged with ochreous, the fore and mid tibiæ in front and tarsi black-brown. Fore wing white irrorated with a few black-brown scales; the costal edge black towards base; a subbasal black spot on costa and patch below the cell; an antemedial black spot on costa with line from it to inner margin, angled inwards in cell and incurved above inner margin; a postmedial black spot on costa with series of points on the veins from it to inner margin, strongly excurved below the spot; a black patch on costa before apex; a subterminal series of minute black points with slight streak at submedian fold; a terminal series of black striæ and patches on the cilia at apex and above middle. Hind wing white with a faint brown tinge, the termen and cilia suffused with brown except towards tornus. Underside of fore wing suffused with brown except the inner area.

Hab. Peru, Carabaya, R. Huacamayo (*Ockenden*), type † ♂ in Coll. Rothschild. *Exp.* 14 millim.

*861 *a*. Clemensia flava.

Clemensia flava, D. Jones, Trans. Ent. Soc. 1914, p. 10, pl. i. f. 26.

♂. Head and thorax bright yellow; antennæ whitish above; palpi dark brown except in front towards base; fore legs black-brown in front; abdomen pale ochreous yellow, the ventral surface bright yellow. Fore wing bright yellow, the costal edge black-brown to near middle. Hind wing pale yellow.

Hab. Brazil, Paraná, Fernandes Pinheiro (*D. Jones*), type † ♂ in Coll. D. Jones. *Exp.* 22 millim.

Genus **ANAULOSIA**.

	Type.
Anaulosia, Schaus, A. M. N. H. (8) vii. p. 368 (1911)	*impolita*.

Proboscis fully developed; palpi obliquely upturned to about vertex of head, slender; frons smooth; eyes large, round; antennæ of female minutely ciliated; tibiæ with the spurs moderate. Fore wing with the apex produced and acute, the termen excurved at middle, excised below apex, and oblique towards tornus; vein 3 from well before angle of cell; 4, 5 from angle; 6 from upper angle; 7, 8, 9 stalked, 7 from beyond 9; 10, 11 from cell. Hind wing with vein 2 from towards angle of cell; 3, 4 coincident; 5 from middle of discocellulars; 6, 7 stalked to near apex; 8 from middle of cell.

In key differs from *Halone* in the fore wing having the apex produced, the termen excised below apex and excurved at middle.

*861 *b*. Anaulosia impolita.

Anaulosia impolita, Schaus, A. M. N. H. (8) vii. p. 368 (1911).

♀. Head and thorax brown suffused with leaden grey; pectus, legs, and abdomen grey-brown, the anal tuft grey. Fore wing

brown suffused with leaden grey. Hind wing brown; the underside grey-brown.

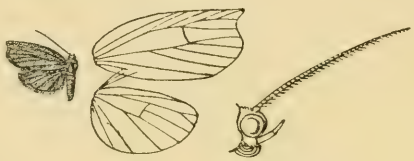

Fig. 234.—*Anaulosia impolita*, ♀. ½.

Hab. Costa Rica, Guapiles (*Schaus*), type † ♀ in U.S. Nat. Mus. *Exp.* 18 millim.

Genus **PARATALARA**.

Type.

Paratalara, Dyar, Pr. U. S. Nat. Mus. xxix. p. 175 (1905) ..... *inversa*.

Proboscis fully developed; palpi porrect to just beyond the frons; antennæ of female ciliated; tibiæ with the spurs long. Fore wing with vein 3 from before angle of cell; 4, 5 strongly stalked; 6, 7, 8, and 10 stalked, 9 absent; 11 free. Hind wing with veins 3, 4 coincident; the upper part of cell produced and vein 5 from well above angle of discocellulars; 6, 7 strongly stalked; 8 from towards end of cell.

In key differs from *Padenia* (♀) in the fore wing having vein 10 stalked with 6, 7, 8; hind wing with veins 3, 4 coincident.

*861 *c*. **Paratalara inversa**.

Paratalara inversa, Schaus, Pr. U.S. Nat. Mus. xxix. p. 203 (1905).

♀. Head and thorax white; palpi and legs tinged with brown; abdomen whitish suffused with fuscous. Fore wing with the basal, costal, and apical areas down to vein 2 white, the rest of wing suffused with fuscous; rufous subbasal and antemedial striæ from

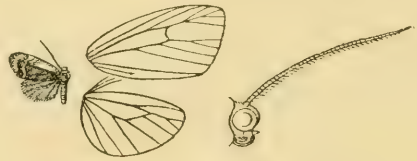

Fig. 235.—*Paratalara inversa*, ♀. ½.

costa; a postmedial rufous band, oblique from costa to median nervure, then obscured by the fuscous area, defined by white on outer side, followed by a rufous mark on costa and rather maculate fuscous band, angled outwards at vein 5 and expanding to termen

above tornus; apex tinged with rufous. Hind wing pale fuscous, the costa whitish.

Hab. Fr. Guiana, St. Jean Maroni, type † ♀ in U.S. Nat. Mus. *Exp.* 16 millim.

Genus **EPITALARA.**

Type.

Epitalara, Dyar, Pr. U.S. Nat. Mus. xxix. p. 175 (1905) ..... *reversa.*

Proboscis fully developed; palpi porrect to just beyond the frons; antennæ of female ciliated; tibiæ with the spurs long. Fore wing with veins 3, 4 strongly stalked; 5 from angle; 6 from upper angle; 7, 8, 9 stalked, 7 from beyond 9; 10, 11 from cell, free. Hind wing with vein 2 from towards angle of cell; 3, 4 coincident; 5 absent; 6, 7 strongly stalked; 8 from towards angle of cell.

In key differs from *Apaidia* in the fore wing having vein 7 from 8 beyond 9; 11 not anastomosing with 12; hind wing with veins 3, 4 coincident.

*861 *d.* Epitalara reversa.

Epitalara reversa, Schaus, Pr. U.S. Nat. Mus. xxix. p. 205 (1905).

♀. Head and thorax whitish tinged with brown; abdomen whitish tinged with fuscous, the anal tuft ochreous white. Fore wing whitish slightly irrorated with brown; traces of a minutely waved antemedial line, angled outwards on median nervure; the apical area mostly dull reddish from middle of costa to tornus,

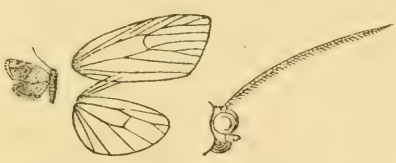

Fig. 236.—*Epitalara reversa*, ♀. ½.

leaving an apical whitish patch with subterminal and apical rufous costal spots on it; a small blackish discoidal spot; an indistinct postmedial line, waved and obliquely excurved from costa to vein 4, then incurved; a dark terminal line with small white spots before it at middle and tornus; cilia chequered fuscous and white. Hind wing pale fuscous. Underside of fore wing pale fuscous leaving a whitish apical patch.

Hab. Fr. Guiana, St. Jean Maroni, type † ♀ in U.S. Nat. Mus. *Exp.* 14 millim.

*861 *e.* Epitalara commixta.

Paratalara commixta, Schaus, A. M. N. H. (8) vii. p. 366 (1911).

Underside of fore wing of male with large elliptical patch of androconia surrounded by silky scaling in and beyond upper angle

of cell, the median nervure curved upwards at base; veins 3, 4 shortly stalked and the upper angle of cell much produced; hind wing with the cell short, a small tuft of black scales in upper angle of cell and a swelling on underside.

♂. Head, tegulæ, and patagia white; thorax brown; palpi and antennæ brown; pectus and legs yellowish white tinged with brown; abdomen grey-brown, the ventral surface yellowish white. Fore wing white, the costal half tinged with pale rufous to the

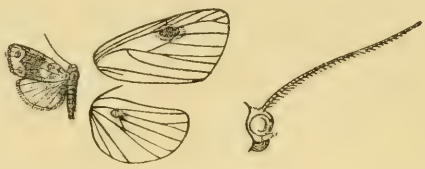

Fig. 237.—*Epitalara commixta*, ♂. ½.

postmedial line, before which there is a large patch of deeper rufous from below costa to inner margin; slight brown subbasal and antemedial bars from costa and diffused brown antemedial patches in cell and on inner area; slight dark brown streaks beyond the cell in discal fold and below veins 3 and 2; the terminal area with diffused brown patches at discal fold and below vein 3. Hind wing white, the costa towards apex and inner area tinged with red-brown; the underside with the terminal half of costal area tinged with red-brown.

Hab. Costa Rica, La Florida (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 18 millim.

Genus **CTENANE**.

	Type.
Ctenane, Swinh. A. M. N. H. (7) xv. p. 497 (1905)	*labuana*.

Proboscis fully developed; palpi porrect, extending about the length of head, the 2nd joint thickly scaled; antennæ of male bipectinate, the apical third ciliated; hind tibiæ with two pairs of spurs. Fore wing short and broad; vein 2 strongly curved, from towards angle of cell; 3 from before angle; 4, 5 from angle; 6 from below upper angle; 7, 8, 9, 10 stalked, 10 from beyond 7; 11 from cell, oblique. Hind wing with veins 3, 4 stalked; 5 from well above angle; 6, 7 stalked; 8 from middle of cell.

In key differs from *Æolosia* in the palpi being porrect, the 2nd joint thickly scaled.

863 *a*. **Ctenane labuana**.

Agrophila labuana, Swinh. Trans. Ent. Soc. 1904, p. 139.
Ctenane labuana, Swinh. A. M. N. H. (7) xv. p. 497 (1905).

♂. Head, thorax, and abdomen grey-white tinged with brown; palpi blackish except at tips. Fore wing grey-white irrorated with brown and blackish; a subbasal black point below costa; antemedial

black points below costa and above vein 1; a diffused medial fuscous-brown band, attenuate at middle and broadening to costa and inner margin; an ill-defined postmedial line oblique from costa to vein 4, then incurved, with black points on it below costa and

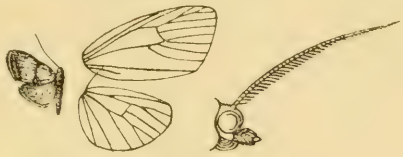

Fig. 238.—*Ctenane labuana*, ♂. ½.

above and below vein 2; terminal area suffused with brown except at apex and with traces of sinuous subterminal line. Hind wing very pale fuscous.

Hab. Labuan, 1 ♂ type. *Exp.* 16 millim.

*865 *a*. **Hyposiccia taivana.** (Plate XXXVII. fig. 30.)

Siccia taivana, Wileman, Entom. xliv. p. 109 (1911).

♀. Head, thorax, and abdomen white, the two former faintly tinged with brown; palpi and antennæ brownish. Fore wing white faintly tinged with brown; a small subbasal black spot below the costa and larger rather triangular spot below the cell; small antemedial black spots below the costa and on subcostal nervure; a black point in middle of cell and small discoidal lunule; a small medial spot on costa and spots above vein 1 and inner margin; a postmedial spot on costa and traces of a postmedial line with series of black points on it, excurved below costa and beyond lower angle of cell, then incurved; a subterminal series of black points; the termen and cilia with small black spots at apex and middle. Hind wing whitish suffused with reddish brown; the underside whiter with slight discoidal spot and traces of postmedial line from costa to discal fold.

Hab. Formosa, Kanshirei (*Wileman*), type † ♀ in Coll. Wileman. *Exp.* 22 millim.

*868 *a*. **Parasiccia nebulosa.** (Plate XXXVII. fig. 31.)

Parasiccia nebulosa, Wileman, Entom. xlvii. p. 162 (1914).

♂. Head and thorax brownish white, the latter with some black-brown mixed; antennæ pale red-brown; palpi black-brown; legs suffused with brown; abdomen grey suffused with brown. Fore wing grey irrorated with black-brown; a patch of black suffusion at base from costa to vein 1, its outer edge somewhat dentate; antemedial line rather diffused, black, bent inwards below submedian

fold; a small round black spot in middle of cell and elliptical discoidal spot; a slight dentate black medial line, oblique to the reniform and inwardly oblique below the cell; a diffused black postmedial line, forming a patch at costa, slightly bent outwards below costa, then dentate, oblique and somewhat maculate below vein 4; subterminal line with oblique black mark from costa, then excurved and almost obsolete to vein 6, then represented by a series of somewhat dentate black spots, connected with the postmedial line by black suffusion between veins 4 and 2; a terminal series of black bars. Hind wing grey suffused with brown; the underside whitish, the costa suffused with brown, a fuscous discoidal spot.

Hab. Formosa, Arizan (*Wileman*), type † ♂ in Coll. Wileman. *Exp.* 32 millim.

868 *b*. **Parasiccia perirrorata.** (Plate XXXVII. fig. 32.)

Parasiccia perirrorata, Hmpsn. A. M. N. H. (7) xi. p. 349 (1903).

♂. White strongly irrorated with fuscous; palpi marked with black. Fore wing with diffused subbasal band; a curved antemedial band expanding at costa into a patch which is angled outwards below costa; a point in middle of cell with a spot on costa above it; a discoidal lunule; a brownish band on inner side of the postmedial line, which is excurved below costa and at median nervules, then strongly incurved; an irregular subterminal line angled inwards in discal fold and incurved below vein 3; a terminal series of small spots. Hind wing white suffused with grey. Underside of fore wing fuscous grey; hind wing white with indistinct discoidal spot and irregular subterminal line.

Hab. W. China, Kia-ting-fu, 1 ♂ type, Omei-shán, 1 ♀. *Exp.* 28 millim.

869. **Parasiccia maculifascia**, insert (syn.):—

Hyposiccia abraxina, Roths. Nov. Zool. xx. p. 202 (1913).

Assam, Khásis, type † ♀ in Coll. Rothschild.

870 *a*. **Parasiccia fuscipennis**, n. sp. (Plate XXXVII. fig. 33.)

♂. Uniform dark reddish brown slightly tinged with grey; palpi, pectus, legs, and ventral surface of abdomen white tinged with red-brown.

Hab. Formosa, Kanshirei (*Wileman*), 1 ♂ type. *Exp.* 18 millim.

*870 *b*. **Parasiccia dentata.**

Hyposiccia dentata, Wileman, Entom. xliv. p. 110 (1911).

Hind wing with veins 3, 4 stalked.

♂. Head, thorax, and abdomen brown; tibiæ and tarsi whitish

banded with brown. Fore wing brownish white; the basal area suffused with dark brown to just before the dentate brown antemedial line; a black point in middle of cell and lunulate black discoidal spot; a medial blackish spot on costa and oblique dentate brown line from lower angle of cell to inner margin, the area beyond it suffused with brown to the postmedial line, which is oblique to vein 6, incurved at discal fold, and oblique and dentate

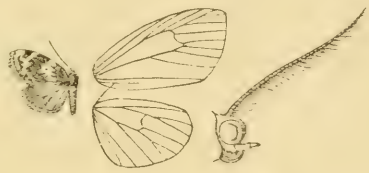

Fig. 239.—*Parasiccia dentata*, ♂. ½.

below vein 4; a subterminal blackish patch on costa, irregular mark at middle with minute blackish streaks on the veins, and minute blackish streaks on veins 3, 2, and 1; a terminal series of black striæ; cilia with brownish spot at middle. Hind wing brown.

Hab. Formosa, Taiwan (*Wileman*), type † ♂ in Coll. Wileman. *Exp.* 18 millim.

871 *a*. **Parasiccia punctilinea.** (Plate XXXVII. fig. 34.)

Parasiccia punctilinea, Wileman, Entom. xliv. p. 174 (1911).

Head, thorax, and abdomen grey suffused with brown; palpi black; fore and mid legs suffused with black; hind legs and ventral surface of abdomen pale grey. Fore wing grey suffused with brown, the basal area and a postmedial band darker; a black point at base and subbasal points below the costa and cell; two antemedial points on costa and points in cell, on median nervure and vein 1; a black spot in middle of cell and small discoidal lunule; a dark line from middle of costa angled outwards beyond the angles of cell, then incurved and excurved above inner margin, with the darker postmedial band on its outer side, its outer edge defined by a series of short black dashes; a subterminal series of somewhat dentate fuscous marks, angled outwards at veins 7, 6, and 4; a terminal series of small blackish spots; cilia with a slight blackish line at middle from apex to vein 4. Hind wing grey tinged with fuscous; the underside paler with slight dark discoidal spot.

Hab. Formosa, Kanshirei (*Wileman*), 1 ♂, 2 ♀. *Exp.* ♂ 24, ♀ 30 millim. Type † ♂, ♀ in Coll. Wileman.

*871 *b*. Parasiccia ochrorubens.

Miltochrista ochrorubens, Mab. Ann. Soc. Ent. Fr. 1899, p. 726.

♂. Flesh-pink; metathorax with tuft of black scales. Fore wing irrorated with a very few large black scales; an indistinct pale curved antemedial line; an indistinct pale postmedial line oblique from costa to discal fold where it is acutely angled, then inwardly oblique; very slight brownish suffusion between the lines and beyond the postmedial line; some black points on termen below apex. Hind wing pale yellow, the apex slightly tinged with pink.

Hab. Madagascar, Baie d'Antongil (*Mocquerys*), type † ♂ in Mus. Paris. *Exp.* 22 millim.

873 *a*. Ovipennis binghami. (Plate XXXVII. fig. 35.)

Ovipennis binghami, Hmpsn. A. M. N. H. (7) xi. p. 349 (1903).

♀. Head and thorax white; palpi at base, antennæ, base of tegulæ, and a band across patagia and thorax fuscous; fore and mid legs and extremities of hind tibiæ and tarsi fuscous above; abdomen ochreous with the terminal segments grey, the ventral surface white. Fore wing with the basal area orange with obliquely sinuous outer edge; the rest of wing pale reddish brown becoming fuscous towards apex, the margins white. Hind wing fuscous, the inner area pale reddish brown; the cilia white.

Hab. Up. Burma, Byingui, 2500′ (*Bingham*), 1 ♀ type. *Exp.* 20 millim.

*875 *a*. Asuridia decussa. (Plate XXXVII. fig. 36.)

Asura decussa, Beth.-Baker, A. M. N. H. (8) vi. p. 443 (1910).

♂. Head and thorax ochreous yellow, the vertex of head and upper edge of patagia with fuscous streaks; palpi and fore legs tinged with crimson, the fore tibiæ with fuscous band at extremity; abdomen clothed with ochreous whitish hair. Fore wing ochreous yellow, the costal area, especially towards apex, and the terminal area tinged with crimson, the costal edge fuscous except at middle; a black point in cell near base; antemedial line fuscous, angled outwards at median nervure, then oblique; medial line angled inwards at median nervure to the antemedial line and oblique towards costa and inner margin; postmedial line touching the medial line at costa and inner margin and angled outwards beyond lower angle of cell, the two lines forming a diamond-mark; cilia black. Hind wing pale ochreous yellow, the costa and cilia towards apex fuscous. Underside of fore wing and costal area of hind wing tinged with crimson.

Hab. Dutch N. Guinea, Arfak Mts. (*Pratt*), type † ♂ in Coll. Kenrick. *Exp.* 24 millim.

*876 *a*. **Asuridia miltochristoides.** (Plate XXXVIII. fig. 1.)

Asuridia miltochristoides, Roths. Nov. Zool. xx. p. 202 (1913).

♀. Head and thorax pink; antennæ tinged with fuscous; pectus and abdomen ochreous yellow; palpi and legs brown. Fore wing pink, the costal edge black towards base; a subbasal black spot in cell; antemedial line black, excurved below costa, angled inwards in submedian fold, then again excurved; an oblique black medial line; a small black discoidal spot; postmedial line black, oblique to discal fold, then inwardly oblique to vein 2 and erect to inner margin, the veins beyond it streaked with black to near termen, forking on veins 8, 7. Hind wing pale pink. Underside of fore wing with the basal costal area and the disk suffused with blackish.

Hab. Assam, Khásis, type † ♀ in Coll. Rothschild. *Exp.* 24 millim.

*876 *b*. **Asuridia ridibunda.**

Asuridia ridibunda, Snell. Tijd. v. Ent. xlvii. p. 156, pl. 11. f. 5 (1904).

Head, thorax, and abdomen pale reddish with a yellow tinge. Fore wing pale reddish with a yellow tinge; a black point at base; a subbasal series of four short black streaks; antemedial line black, slightly angled outwards below costa, then curved; medial line oblique, slightly angled inwards at median nervure and vein 1; a small black discoidal spot; postmedial line angled outwards at veins 6 and 4, then bent inwards to below end of cell and erect to inner margin; a subterminal series of short black streaks. Hind wing pale reddish with a yellow tinge.

Hab. Java, Batavia. *Exp.* 16–22 millim. This species is unknown to me.

Larva. Piepers, Tijd. v. Ent. xlvii. p. 156, pl. 10. f. 9.

Pale brown with long white, grey, and black hairs; each of the anterior abdominal somites with two tufts of hair forming short brushes; the anal somite with several oblique plumose hairs or sometimes short hairs forming brushes. Food-plant, young shoots of *Durio zibethinus*.

Cocoon formed of single hairs forming circles on leaves.

876 *c*. **Asuridia nigrisparsa**, n. sp. (Plate XXXVIII. fig. 2.)

♀. Head and thorax pale crimson irrorated with blackish; abdomen pale crimson. Fore wing pale crimson thickly irrorated with blackish, the costal edge black; antemedial line blackish, excurved from below costa to vein 1; an oblique medial blackish line slightly curved inwards to costa; postmedial line blackish, oblique to vein 6, then inwardly oblique; the terminal area with obscure diffused blackish streaks in the interspaces; cilia black. Hind

wing pale crimson, the cilia tinged with fuscous towards apex; the underside with the terminal area suffused with fuscous to vein 3.

Hab. Dutch N. Guinea, Kapaur (*Doherty*), 1 ♀ type. *Exp.* 28 millim.

876 *d*. **Asuridia phœnicea**, n. sp. (Plate XXXVIII. fig. 3.)

♀. Head and thorax crimson, the frons and vertex of head with fuscous streaks; the tegulæ, shoulders, pro- and metathorax with fuscous patches, the patagia with curved fuscous fasciæ; abdomen pale crimson, the ventral surface fuscous. Fore wing crimson suffused and irrorated with fuscous, the costa towards apex and termen more crimson; a curved fuscous antemedial line conjoined in the cell to an incurved medial line which is confluent towards costa and inner margin with an excurved postmedial line; bright crimson patches beyond the antemedial line on costal and inner areas and beyond the medial line in and below end of cell; the terminal part of costal edge and cilia black with a purplish gloss. Hind wing pale crimson, the cilia fuscous to vein 2. Underside crimson with the apical area of both wings suffused with fuscous.

Hab. Goodenough I. (*Meek*), 1 ♀ type. *Exp.* 32 millim.

*877 *a*. **Asuridia subcruciata**. (Plate XXXVIII. fig. 4.)

Miltochrista subcruciata, Roths. Nov. Zool. xx. p. 214 (1913).

♂. Head and thorax orange-scarlet; abdomen yellowish tinged with scarlet. Fore wing orange-scarlet; the costal edge blackish towards base; a subbasal blackish point in cell; antemedial line blackish, angled outwards in the cell to the medial line, then oblique; medial line incurved in cell to the antemedial line; postmedial line arising from costa at the antemedial line, oblique to lower angle of cell, then somewhat incurved, the area beyond it with some pale fuscous irroration to near termen; the costa beyond the postmedial line and cilia black. Hind wing yellow tinged with scarlet; cilia fuscous towards apex. Underside of fore wing pale scarlet, the costal area towards apex and terminal area to vein 3 tinged with fuscous; hind wing with the apical area tinged with fuscous.

Hab. Little Ké I. (*Kühn*), type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

Genus **MICROHYLE**.

	Type.
Microhyle, Hmpsn. A. M. N. H. (7) xv. p. 437 (1905)	*fadella*.

Proboscis aborted, small; palpi upturned, hardly reaching to vertex of head, the 3rd joint acuminate; antennæ of male bipectinate with very long branches; tibiæ with the spurs long. Fore wing with vein 2 from middle of cell; 3 from before angle; 5 from above angle; 6 from upper angle; 7, 8, 10 stalked

from before angle, 9 absent; 11 free. Hind wing with vein 2 from middle of cell; 3, 4 coincident; 5 from well above angle; 6, 7 on a long stalk; 8 from middle of cell.

In key differs from *Paidia* in the fore wing having vein 10 stalked with 7, 8; hind wing with veins 3, 4 coincident.

*880 *a*. Microhyle fadella.

Hylemera fadella, Mab. Le Nat. ii. p. 100 (1882); Kirby, Cat. Het. p. 427.

♂. Head and thorax ochreous, the branches of antennæ black; abdomen orange. Fore wing ochreous white tinged with orange; the basal and terminal areas irrorated and suffused with dark brown leaving a pale broad medial band; the terminal area much more thickly suffused, its inner edges slightly angled outwards at lower

Fig. 240.—*Microhyle fadella*, ♂. ½.

angle of cell. Hind wing bright orange, the cilia dark brown. Underside of fore wing orange, the apical area dark brown from costa beyond middle to tornus.

Hab. Madagascar, type † ♂ in Coll. Mabille. *Exp.* 18 millim.

*881 *a*. Xanthetis obiensis. (Plate XXXVIII. fig. 5.)

Xanthetis luzonica, obiensis, Roths. Nov. Zool, xx. p. 203 (1913).

♂. Head orange, the palpi and antennæ black; tegulæ orange tipped with black; thorax black with orange patch on metathorax; pectus and legs black-brown, the hind tibiæ yellow towards base; abdomen black, the ventral surface yellow. Fore wing orange; the costa black except at base, expanding widely towards apex; a black subbasal line; antemedial line black, oblique; connected by a streak on inner margin with the subbasal line; a black spot in middle of cell connected with the antemedial line and a discoidal spot, the two connected by a wedge-shaped patch on and below median nervure; a black postmedial band, excurved to vein 4, then oblique, connected with the discoidal spot, the wedge-shaped patch, and by a patch on inner area with the antemedial line; a black terminal band only separated from the postmedial band by a curved orange line from below costa to vein 1. Hind wing with the basal

area orange with oblique sinuous outer edge from costa towards apex to vein 1; the rest of wing black, the black extending to base on inner area. Underside of fore wing orange, the costal and terminal areas black-brown, black-brown spots in cell and on discocellulars connected by a wedge-shaped patch as above.

♀. Fore wing with the orange areas more extensive and the black reduced, the black on terminal part of median nervure reduced to a streak not touching the discoidal spot, the orange beyond the postmedial band wider; hind wing with the orange extending to beyond middle of wing and to inner margin.

Hab. Obi, Saiwui (*Doherty*), type † ♂ ♀ in Coll. Rothschild; Obi Major (*Waterstradt*). *Exp.* 22–26 millim.

882 *a*. **Xanthetis spurrelli**, n. sp.

Hind wing with veins 3, 4 coincident.

Head and thorax pale yellow; pectus, hind legs, and abdomen whitish. Fore wing yellow with diffused markings formed of red-brown scales; a spot at base of costa; an oblique subbasal line

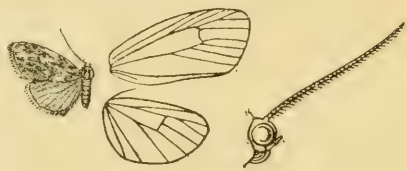

Fig. 241.—*Xanthetis spurrelli*, ♂. ½.

angled outwards below the costa and cell; antemedial line obscurely double, much diffused and waved; a streak beyond it in lower part of cell; postmedial line indistinctly double and much diffused, dentate, strongly incurved below vein 4, a series of diffused spots beyond it, and a terminal series of diffused spots. Hind wing yellow. Underside of fore wing orange with the terminal area whitish.

Hab. Gold Coast, Bibianaha (*Spurrell*), 1 ♂, 2 ♀ type. *Exp.* ♂ 20, ♀ 22 millim.

883. **Endrosa aurita**, insert:—

Ab. *catherinei*, Oberth. Bull. Soc. Ent. Fr. 1908, p. 291.

Ab. *fuliginosa*, Blachier, Bull. Soc. Lép. Geneva, ii. p. 57, pl. i. f. 1 (1910),

for ab. 1.

884. **Endrosa roscida**, ab. *melanomos*, insert:—

Ab. *fumosa*, Schwingen. Verh. zool.-bot. Ges. Wien, lxi. SB. p. 181, (1911).

A form strongly suffused with fuscous.

886. **Cybosia mesomella**, insert:—

Var. *flava*, Preissecker, Verh. zool.-bot. Ges. Wien, lix. SB. p. 233, (1909).

887. **Philea irrorella**, insert:—

Ab. *brunnescens*, Hirschke, Verh. zool.-bot. Ges. Wien, lx. p. 416 (1910),

for ab. 2.

890. **Thumatha inconstans**, insert (syn.):—

Ab. *limbatula*, Strand, Arch. Naturg. lxxviii. 7, p. 192 (1912).

Ab. *delimbatula*, Strand, Arch. Naturg. lxxviii. 7, p. 192 (1912), for ab. 1.

Genus **OPSAROA**.

Type.

Opsaroa, Hmpsn. A. M. N. H. (7) xv. p. 437 (1905)..... *fulvinota*.

Proboscis absent; palpi porrect, not reaching beyond the frons and clothed with long hair; frons with long hair; antennæ of male with very long branches ending in two bristles, and decreasing rather suddenly to apex; fore tibiæ with long process arising from base; hind tibiæ with one pair of spurs; abdomen clothed with long hair. Fore wing with vein 3 from long before angle of cell; 5 from above angle; 6, 7, 8 stalked, 9 absent; 10, 11 from cell. Hind wing with veins 3, 4 from angle of cell; 5 from well above angle; 6, 7 coincident; 8 from close to end of cell.

In key differs from *Poliodule* in the fore wing having vein 5 from the cell, 6, 7, 8 stalked; hind wing with veins 6, 7 coincident.

891 *a*. **Opsaroa fulvinota.**

Opsaroa fulvinota, Hmpsn. A. M. N. H. (7) xv. p. 437 (1905).

♂. Head and thorax clothed with greyish brown hair; patagia with some fulvous hair at extremity; abdomen clothed with orange hair, greyish at base. Fore wing sparsely clothed with red-brown hair; an elongate fulvous yellow mark in and beyond end of cell

with a prominent black discoidal spot on it; an elongate fulvous-yellow patch in submedian interspace from below origin of vein 2

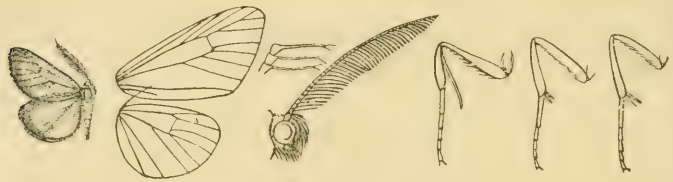

Fig. 242.—*Opsaroa fulvinota*, ♂. $\frac{1}{1}$.

to near termen. Hind wing fulvous orange, the costa, termen, and cilia except towards tornus reddish brown.

Hab. C. Colony, Triangle, 2 ♂ type. *Exp.* 22–24 millim.

Genus **CHRYSASURA**, nov.

Type, *C. flavopunctata*.

Proboscis fully developed; palpi porrect to just beyond frons and fringed with hair below; antennæ bipectinate with long branches to near apex; tibiæ with the spurs moderate. Fore wing with vein 3 from before angle of cell; 5 from well above angle; 6, 7, 8, 10 stalked in male, 6 from cell in female, 9 absent; 11 from cell. Hind wing with vein 3 from well before angle of cell; 5 from well above angle; 6, 7 stalked almost to termen; 8 from close to angle of cell.

In key differs from *Leptopepla* in the fore wing having vein 9 absent.

*892 *a*. Chrysasura flavopunctata.

Halone flavopunctata, Beth.-Baker, Nov. Zool. xi. p. 421, pl. v. f. 28 (1904).

Asura flavopunctata, punctatissima, Roths. Nov. Zool. xx. p. 207 (1913).

♂. Head, thorax, and abdomen black-brown; back of head, tegulæ, shoulders, and patagia with orange patches; tibiæ and

Fig. 243.—*Chrysasura flavopunctata*, ♂. $\frac{3}{2}$.

tarsi yellowish white at base. Fore wing dark brown suffused with orange except on costal and terminal areas; a small orange

spot at base and two on base of inner margin; a spot on middle of costa with two small spots beyond it; a small black discoidal spot; small orange subterminal spots in discal and submedian folds. Hind wing deep orange; a short black streak on base of vein 1; a terminal black band, broad at apex and narrowing to a point at tornus.

Ab. 1. *punctatissima*. Fore wing somewhat blacker with the spots more distinct.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♂ *punctatissima* in Coll. Rothschild; Br. N. Guinea, Dinawa, 40 0′ (*Pratt*), type † ♂ in Coll. Bethune-Baker. *Exp.* 24 millim.

*892 *b*. **Chrysasura leopardina.** (Plate XXXVIII. fig. 6.)

Asura leopardina, Roths. Nov. Zool. xx. p. 209 (1913).

Head and thorax orange, the antennæ black; the patagia, pro- and metathorax with black spots; legs brown; abdomen orange with dorsal blackish bands. Fore wing orange; the costa black towards base, a black streak on base of inner margin, and subbasal black spots below costa and cell, the former conjoined to the black on costa; an antemedial black line from costa to median nervure and a line rather nearer the base from cell to inner margin; a slightly incurved medial black line, and a black discoidal spot; postmedial line black, oblique to vein 6 where it is angled outwards, angled inwards at discal fold and outwards at vein 4, then incurved and somewhat dentate; a curved subterminal series of seven black spots; the costa towards apex and cilia black. Hind wing orange with narrow black terminal band.

Hab. N. Celebes, Toli-toli (*Frühstorfer*), type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 16, ♀ 18 millim.

*892 *c*. **Chrysasura postvitreata.** (Plate XXXVIII. fig. 7.).

Asura leopardina, postvitreata, Roths. Nov. Zool. xx. p. 209 (1913).

♂. Head and thorax orange; antennæ and tips of patagia black; legs brown; abdomen orange, dorsally black-brown except at base. Fore wing orange; the costa black towards base; small spots near base below costa and cell and a streak on inner margin; larger subbasal spots below the costa and cell, the former conjoined to the black on costa; an antemedial black line from costa to median nervure and a line nearer the base from cell to inner margin; a slightly incurved medial black line and black discoidal spot; postmedial line black, oblique to vein 6 where it is angled inwards, incurved at discal fold, angled outwards at vein 4, then incurved and somewhat dentate; a curved subterminal series of six black spots; the costa towards apex and cilia black. Hind wing hyaline,

the costal area tinged with orange to discal fold, the terminal area suffused with black-brown.

Hab. S. Celebes, Bonthain, type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

*894 *a*. **Neasura rufescens.** (Plate XXXVIII. fig. 8.)

Tigrioides rufescens, Roths. Nov. Zool. xix. p. 218 (1912).

♂. Head and thorax orange-yellow; antennæ brownish; palpi and fore legs black; abdomen whitish tinged with orange-yellow, the extremity blackish. Fore wing orange-yellow suffused with fuscous brown except the marginal areas, the costa black towards base. Hind wing fuscous brown, the base and inner margin yellowish; the underside with the costal area orange-yellow to beyond middle.

Ab. 1. Fore wing with the suffusion on disk blacker.

Hab. Br. N. Guinea, Kumusi R. (*Meek*), type † ♂ in Coll. Rothschild; Milne Bay. *Exp.* 24 millim.

894 *b*. **Neasura taprobana.** (Plate XXXVIII. fig. 9.)

Neasura taprobana, Hmpsn. A. M. N. H. (7) xix. p. 232 (1907).

♂. Ochreous yellow; antennæ at tips, fore legs in front and extremities of mid and hind tibiæ fuscous. Fore wing with black point in base of cell; the costa fuscous to the curved diffused antemedial line; a blackish discoidal point on some fuscous suffusion; postmedial line very diffused and ill-defined, waved, emitting streaks inwards on the veins and outwards on veins 7, 6, 4. Hind wing with slight fuscous suffusion below apex.

Hab. Ceylon, Maskeliya (*J. Pole*), 1 ♂ type. *Exp.* 24 millim.

*894 *c*. **Neasura circumducta.** (Plate XXXVIII. fig. 10.)

Lithosia circumducta, Pag. Zoologica, xii. 29. p. 57 (1900).

♂. Head, thorax, and abdomen orange-yellow; fore tibiæ and tarsi above blackish; extremities of mid tibiæ and mid and hind tarsi black. Fore wing orange-yellow; the whole disk suffused with black between subcostal nervure and vein 1 and beyond the cell from just below costa to just above inner margin leaving the termen orange; antemedial black points on and below costa. Hind wing fuscous black, the costal and inner margins narrowly orange; cilia tinged with orange.

Hab. New Britain (*Ribbé*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

*895 *a*. Zygænosia lata. (Plate XXXVIII. fig. 11.)

Zygænopsis lata, Roths. Nov. Zool. viii. p. 415 (1901).

♀. Black; head, basal joint of antennæ, tegulæ, pectus, legs, and abdomen orange. Fore wing hyaline, the veins and margins black, the inner area and apex widely so; the basal area orange from subcostal nervure to inner margin and a triangular patch on vein 1 beyond middle.

Fore wing with vein 7 from 8 before 9.

Hab. D'Entrecasteaux Is., Ferguson I. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 26 millim.

*895 *b*. Zygænosia papua.

Northia papua, Oberth. Ét. Ent. xix. p. 28, pl. 5. f. 38 (1894).

♂. Black; palpi, frons, basal joint of antennæ in front, pectus, and legs orange-yellow; abdomen orange, the 1st segment partly black, the terminal segment and claspers dorsally black. Fore wing with orange patches on vein 1 on basal area and at middle; the interspaces hyaline except towards margins; the discocellulars narrowly black.

Fore wing with vein 7 from 8 before 9.

Hab. Dorey. *Exp.* 24 millim.

895 *c*. Zygænosia tetragona. (Plate XXXVIII. fig. 12.)

Procris tetragona, Wlk. xxxi. p. 62 (1864); Kirby, Cat. Het. p. 86.
Zygænopsis medioplaga, Roths. Nov. Zool. viii. p. 414 (1901).

♂. Black; palpi, frons, basal joint of antennæ in front, tegulæ, patagia, pectus, and legs orange, the fore tibiæ and base of mid and hind tibiæ above black; abdomen with the ventral surface orange except the claspers. Fore wing with orange medial patch from submedian fold to inner margins; the interspaces semihyaline except towards margins.

Fore wing with vein 7 from 8 before 9.

Hab. Batchian (*Doherty*), 1 ♂. *Exp.* 24 millim. Type † ♂ *medioplaga* in Coll. Rothschild.

895 *d*. Zygænosia meeci. (Plate XXXVIII. fig. 13.)

Zygænopsis meeki, Roths. Nov. Zool. viii. p. 415 (1901).

♂. Black; palpi, frons, basal joint of antennæ in front, pectus, and legs orange, the fore and mid tibiæ above black; abdomen orange, the basal segment and claspers above black. Fore wing hyaline, the veins, a discoidal bar and margins black, the inner

margin and apex widely so; an orange patch at base from submedian fold to inner margin and an elongate spot at tornus. Hind wing with hyaline fascia on costal area, the costal edge yellow to beyond middle.

Fore wing with vein 7 from 8 before 9.

Hab. New Guinea, Milne Bay (*Meek*), 2 ♂. *Exp.* 26 millim. Type † ♂ in Coll. Rothschild.

*895 *e*. **Zygænosia basalis.** (Plate XXXVIII. fig. 14.)

Zygænopsis basalis, Roths. Nov. Zool. viii. p. 412 (1901).

♂. Black; palpi, frons, basal joint of antennæ in front, pectus, and legs orange, the fore tibiæ with a little fuscous above; abdomen orange, the claspers black above. Fore wing with orange patch on inner area from near base to before middle; the interspaces hyaline except towards margins. Underside of hind wing with the costal edge yellow on basal two-thirds.

Fore wing with veins 7, 8, 9 from a point.

Hab. D'Entrecasteaux Is., Ferguson I. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 28 millim.

Subsp. 1. Fore wing with the orange patch larger.

Hab. Br. N. Guinea, Milne Bay.

895. **Zygænosia flavibasis,** insert:—

Subsp. 1. *abdominalis*, Roths. Nov. Zool. viii. p. 413 (1901).

♂. Palpi, frons, pectus, and legs orange; fore and mid tibiæ above fuscous, the hind tibiæ with a little fuscous at extremities; abdomen orange, the 1st and terminal segments above black.

Fore wing with vein 7 from 8 before 9.

Hab. Br. N. Guinea, Milne Bay (*Meek*), type † ♂ in Coll. Rothschild, Mailu (*Anthony*); D'Entrecasteaux Is., Ferguson I. (*Meek*).

Subsp. 2. *immaculata*, Roths. Nov. Zool. viii. p. 414 (1901).

♂. Fore wing with vein 7 from 8 before 9; no orange spot on basal inner area.

Hab. Br. N. Guinea, Humboldt Bay (*Doherty*), type † ♂ in Coll. Rothschild.

*895 *f*. **Zygænosia assimilis.** (Plate XXXVIII. fig. 15.)

Zygænopsis assimilis, Roths. Nov. Zool. viii. p. 413 (1901).

♂. Black-brown; palpi, basal joint of antennæ in front, pectus, and legs orange; abdomen orange, the terminal segment and claspers above black. Fore wing with orange streak in base of cell and elongate patch above and below vein 1 on basal area; the

interspaces hyaline except towards margins. Underside of hind wing with the costal edge yellow on basal two-thirds.

Fore wing with vein 7 from 8 before 9.

Hab. Salawatti (*Doherty*), type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

*895 *g*. Zygænosia flaviceps. (Plate XXXVIII. fig. 16.)

Zygænopsis flaviceps, Roths. Nov. Zool. viii. p. 415 (1901).

♂. Black; head, basal joint of antennæ, tegulæ, shoulders, pectus, legs, and ventral surface of abdomen except claspers orange, fore tibiæ at extremities black above. Fore wing with orange patch on basal area from submedian fold to inner margin; the interspaces semihyaline except towards inner margins.

Fore wing with vein 7 from 8 before 9.

Hab. Batchian (*Doherty*), type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

Subsp. 1. *cingulata*, Roths. Nov. Zool. viii. p. 415 (1901).

♂. The whole thorax and the 2nd and 3rd segments of abdomen and part of 4th orange.

Hab. Ternate (*Doherty*), type † ♂ in Coll. Rothschild.

*895 *h*. Zygænosia fumigata.

Machærophora fumigata, Pag. Zoologica, xii. 29. p. 63, pl. i. f. 18 (1900).

♂. Fuscous brown; hind legs below and ventral surface of abdomen yellowish. Fore wing with dull orange spot above base of vein 1.

Fore wing with vein 7 from 8 before 9.

Hab. New Britain, type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

895 *i*. Zygænosia isabella. (Plate XXXVIII. fig. 17,)

Zygænopsis salomonis, isabella, Roths. Nov. Zool. viii. p. 412 (1901).

Head, thorax, and abdomen orange; antennæ blackish; fore and mid tibiæ with some black above towards extremities. Fore wing hyaline tinged with fuscous, especially on the veins and marginal areas. Hind wing semihyaline fuscous.

Hab. Solomon Is., Isabel I. (*Meek*), 1 ♂, 1 ♀. *Exp.* 28 millim.

*895 *j*. Zygænosia salomonis. (Plate XXXVIII. fig. 18.)

Zygænopsis salomonis, Roths. Nov. Zool. viii. p. 412 (1901).

♂. Head and thorax orange; abdomen orange with the dorsal surface black leaving slight segmental orange lines; wings fuscous

black and thinly scaled, the fore wing almost hyaline except towards margins.

♀. Abdomen with the black on dorsum slight on medial segments.

Fore wing with vein 7 from 8 before 9.

Hab. Solomon Is., Guadalcanar I. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

895 *k*. **Zygænosia fuscimarginalis**, Swinh.

*895 *l*. **Zygænosia subhyalinifascia.** (Plate XXXVIII. fig. 19.)

Zygænosia subhyalinifascia, Roths. Nov. Zool. xx. p. 205 (1913).

♂. Head, thorax, and abdomen fuscous black; hind legs whitish tinged with brown; abdomen with the ventral surface whitish except at extremity. Fore wing fuscous black with large hyaline medial patch from just below costa to vein 1. Hind wing fuscous black, the costal area and cell semihyaline.

Fore wing with vein 7 from 8 before 9.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

*895 *m*. **Zygænosia fuliginosa.** (Plate XXXVIII. fig. 20.)

Zygænosia fuliginosa, Roths. Nov. Zool. xx. p. 205 (1913).

♂. Head, thorax, and abdomen fuscous black. Fore wing semihyaline tinged with fuscous black, the veins, inner and terminal areas darker. Hind wing semihyaline suffused with fuscous black.

Fore wing with vein 7 from 8 before 9.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 28 millim.

*895 *n*. **Zygænosia rubiana.** (Plate XXXVIII. fig. 21.)

Zygænopsis rubiana, Roths. Nov. Zool. x. p. 312 (1903).

♂. Head, thorax, and abdomen fuscous black; ventral surface orange except at extremity. Fore wing hyaline, the veins and margins fuscous black, diffused on latter. Hind wing semihyaline fuscous black, the veins and terminal line darker.

Hab. Solomon Is., Kulambanga I. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

*895 *o*. **Zygænosia fumosa.**

Zygænopsis fumosa, Roths. Nov. Zool. viii. p. 411 (1901).

♂. Fuscous brown; wings thinly scaled.

Fore wing with vein 7 from 8 before 9.

Hab. Dutch N. Guinea, Geelvink Bay, Suer-Mefor (*Doherty*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

Subsp. 1. *flaviventris*, Roths. Nov. Zool. viii. p. 411 (1901).

♂. Ventral surface of abdomen dull orange-yellow.

Hab. Dutch N. Guinea, Geelvink Bay, Biak (*Doherty*), type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

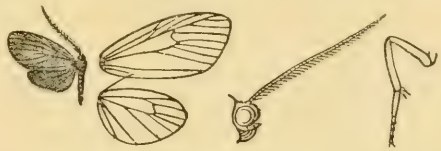

Fig. 244.—*Zygænosia fumosa*, ♂. ½.

Subsp. 2. *inferna*, Roths. Nov. Zool. viii. p. 412 (1901).

♀. Frons, basal joint of antennæ, legs except terminal part of fore and mid tibiæ above, and ventral surface of abdomen bright orange-yellow.

Hab. Obi, Laiwui (*Doherty*), type † ♀ in Coll. Rothschild. *Exp.* 26 millim.

Genus **PHACUSOSIA**.

Type.

Phacusosia, Hmpsn. A. M. N. H. (8) viii. p. 404 (1911) ..... *xanthosoma*.

Proboscis fully developed; palpi porrect, not extending beyond the frons which is rounded; antennæ of female ciliated; hind tibiæ with two pairs of spurs. Fore wing long and narrow, the apex rounded, the termen obliquely curved; veins 3, 4 from angle of cell; 5 from well above angle; 6, 7, 8 stalked, 9 absent; 10, 11 from cell. Hind wing with vein 2 from near angle of cell; 3, 4 on a long stalk; 5 from just below middle of discocellulars; 6, 7 on a long stalk; 8 from middle of cell.

In key differs from *Narasodes* in the fore wing having vein 6 stalked with 7, 8.

895*p*. **Phacusosia xanthosoma.**

Phacusosia xanthosoma, Hmpsn. A. M. N. H. (8) viii. p. 405 (1911).

♀. Head and thorax dark brown; shoulders with orange bar; metathorax with orange patch; coxæ yellow; abdomen orange

Fig. 245.—*Phacusosia xanthosoma*, ♀. ½.

with lateral brown patches at base and the extremity dark brown. Fore wing dark brown; a small yellow spot at base of cell; a wedge-shaped hyaline patch in cell and elongate patch below it

bisected by the dark submedian fold; a blackish discoidal patch; hyaline streaks beyond the cell between veins 10 and 2, the streak above vein 2 slight. Hind wing black-brown; the costal area whitish to near apex; a hyaline streak below the cell.

Hab. Br. N. Guinea, Babooni (*Pratt*), 1 ♀ type. *Exp.* 36 millim.

*895 *q*. **Phacusosia grandis.** (Plate XXXVIII. fig. 22.)

Phacusosia grandis, Roths. Nov. Zool. xx. p. 203 (1913).

♀. Head and thorax black-brown; palpi with the 1st joint and the 2nd except above orange; frons orange; tegulæ orange with black edges; patagia at base and patches on pro- and metathorax orange; coxæ and tarsi except towards base orange; abdomen orange with dorsal black patch at extremity. Fore wing black-brown with some orange scales; small orange spots at base of costa and cell and a small subbasal spot in the cell; an elongate hyaline patch in cell, bifurcate at extremity and a streak below middle of cell; small hyaline spots beyond the cell above veins 6, 5, 4. Hind wing black-brown, the costa pale to beyond middle; a semihyaline streak below the cell.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 46 millim.

*895 *r*. **Trichocerosia signata.** (Plate XXXVIII. fig. 23.)

Trichocerosia signata, Roths. Nov. Zool. viii. p. 418 (1901).

♀. Black; patagia with orange spots; tarsi with the proximal joints yellow. Fore wing elongate; an elliptical orange patch extending from near base to beyond middle and from below costa to just below vein 1 near base and to it at middle; an elliptical patch from just beyond the cell to near termen between veins 8 and 5 and a small subterminal spot above vein 2. Hind wing orange; the inner margin black; a terminal black band broad at costa narrowing to a point at tornus.

Hab. Louisiade Is., Sudest I. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 22 millim.

895 *s*. **Trichocerosia atrifulva**, insert (syn.):—

Zygænosia nigrorufa, Roths. Nov. Zool. xx. p. 205 (1913).

Br. N. Guinea, Kumusi R. (*Meek*), type † ♂ in Coll. Rothschild.

*895 *t*. **Trichocerosia woodlarciana.** (Plate XXXVIII. fig. 24.)

Trichocerosia woodlarkiana, Roths. Nov. Zool. viii. p. 418 (1901).

♂. Black, proximal joints of tarsi yellow. Fore wing very narrow, with orange patch from near base to middle, its inner

edge irregular, its outer excurved at median nervure, then retracted to well before middle of wing. Hind wing with the basal half orange from costa to median nervure; the underside with slight orange marks on inner area.

Hab. Woodlark I. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

*895 *u*. **Trichocerosia elongata.** (Plate XXXVIII. fig. 25.)

Trichocerosia elongata, Roths. Nov. Zool. viii. p. 418 (1901).

♂. Black; patagia with orange spots; tarsi with the proximal joints yellow. Fore wing very narrow with orange subbasal patch from below costa to vein 1, its outer edge excurved from middle of cell to submedian fold. Hind wing with the basal half orange from costa to median nervure.

♀. Wings broader; hind wing with the orange extending to vein 1.

Hab. Louisiade Is., St. Aignan (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

*895 *v*. **Trichocerosia zebrina.** (Plate XXXVIII. fig. 26.)

Trichocerosia zebrina, Turner, ined.

♀. Black; frons, vertex of head, extremity of abdomen, and some lateral points orange. Fore wing with inwardly oblique antemedial orange-fulvous band from below costa to inner margin; a wedge-shaped spot above middle of inner margin; an oblique medial band from above median nervure to vein 1 with a narrow band just beyond it from below costa to inner margin; quadrate pale ochreous subterminal spots between veins 5 and 3 and from above 2 to submedian fold. Hind wing with fulvous antemedial maculate band from below costa to vein 1 and a triangular-shaped band from below middle of costa to above tornus.

Hab. N. S. Wales, Lilyvale (*Lyell*), type † ♀ in Coll. Turner. *Exp.* 28 millim.

896. **Tricholepis xanthomelas**, insert:—

Subsp. 1. Fore wing with the orange patch slightly reduced.

Hab. Ké I.

Subsp. 2. *negrita*, Roths. Nov. Zool. viii. p. 417 (1901).

♀. Fore wing with the orange patch reduced to fasciæ above and below vein 1 from near base to middle. Hind wing black with pale yellow fascia on costa to beyond middle and some diffused orange in and below the cell.

Hab. Ké Is., Koer I. (*Kühn*), type † ♀ in Coll. Rothschild. *Exp.* 22 millim.

896 *a*. **Tricholepis melanoxantha.** (Plate XXXVIII. fig. 27.)

Tricholepis melanoxantha, Hmpsn. A. M. N. H. (8) viii. p. 405 (1911).

♂. Head and thorax orange; palpi and antennæ black; pectus and legs black-brown, the former with some orange in front and at sides; abdomen black-brown, the ventral surface orange except at extremity. Fore wing with the basal half orange, its outer edge straight and erect; a slight subbasal black streak on costa; the terminal half black-brown. Hind wing black with the costal area to near apex and the cell orange.

Hab. Moluccas, Batian (*Doherty*), 1 ♂ type. *Exp.* 16 millim.

*896 *b*. **Tricholepis rhodia.** (Plate XXXVIII. fig. 28.)

Tricholepis rhodia, Roths. Nov. Zool. viii. p. 416 (1901).

♀. Fuscous brown; head, basal joint of antennæ, thorax, pectus, legs, and ventral surface of abdomen orange; fore tibiæ and extremities of mid and hind tibiæ above fuscous. Fore wing with rounded orange-red postmedial patch in and beyond lower end of cell and extending down to vein 1.

Hab. Ternate (*Doherty*), type † ♀ in Coll. Rothschild; Gilolo, Gani (*Doherty*). *Exp.* 24 millim.

*896 *c*. **Tricholepis sinapis.** (Plate XXXVIII. fig. 29.)

Zygænosia sinapis, Roths. Nov. Zool. xx. p. 205 (1913).

♀. Head, thorax, and abdomen fulvous yellow; antennæ black-brown; fore tibiæ and tarsi suffused with brown in front. Fore wing fulvous yellow, the veins, costal edge, and cilia black-brown. Hind wing fuscous brown, the costal area fulvous yellow to near apex; the underside pale fulvous yellow to median nervure and vein 2.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 28 millim.

*896 *d*. **Tricholepis ochracea.** (Plate XXXVIII. fig. 30.)

Tricholepis ochracea, Roths. Nov. Zool. viii. p. 417 (1901).

♂. Fulvous orange; antennæ black except basal joint; abdomen with subdorsal black fasciæ, the anal tuft fuscous. Fore wing with the costa and termen narrowly black-brown. Hind wing with black-brown fascia on inner area; the terminal area black-brown diffused on inner side and running inwards in discal and submedian folds.

Hab. New Guinea, Humboldt Bay (*Doherty*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

*896 *e*. **Tricholepis unicolor.** (Plate XXXVIII. fig. 31.)

Tricholepis unicolor, Roths. Nov. Zool. viii. p. 417 (1901).

Antennæ of male with the branches very short.

♂. Fuscous brown; palpi except at tips, frons, pectus, legs, and

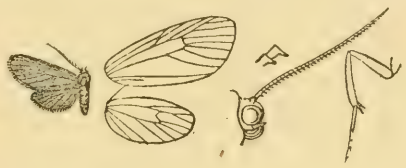

Fig. 246.—*Tricholepis unicolor*, ♂. ½.

ventral surface of abdomen orange-yellow, the fore tibiæ and mid and hind tibiæ at extremity fuscous above.

Hab. Amboina (*Doherty*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

*897 *a*. **Tricholepis bicolorata.**

Miltochrista bicolorata, Pag. Zoologica, xii. 29. p. 62, pl. ii. f. 25 (1900).

Antennæ of male ciliated; wings rather smoothly scaled.

♂. Orange-yellow; antennæ fuscous; fore tibiæ and tarsi above mostly black; mid tibiæ with blackish streak above towards extremity. Fore wing with the terminal third fuscous black, its

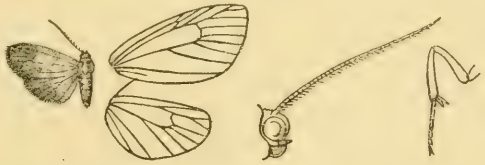

Fig. 247.—*Tricholepis bicolorata*, ♂. ½.

inner edge oblique from costa to vein 4 where it is angled, then angled inwards at vein 2; the apex slightly orange. Hind wing with the terminal third fuscous black, its inner edge slightly angled inwards below costa, incurved below angle of cell, then bent outwards to tornus.

Hab. New Britain (*Ribbé*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

897 *b*. **Tricholepis xanthopera.** (Plate XXXVIII. fig. 32.)

Tricholepis xanthopera, Hmpsn. A. M. N. H. (7) xix. p. 233 (1907).

♂. Head and thorax fulvous yellow; abdomen yellowish, dorsally tinged with brown. Fore wing pale brown, the base, costa, and terminal area pale yellow. Hind wing pale yellow tinged with brown except the terminal area.

Hab. Singapore (*Ridley*), 1 ♂ type. *Exp.* 16 millim.

898. **Gymnasura saginæa,** insert (syn.):—

Calligenia limonis, Lucas, Pr. R. Soc. Queensl. xv. p. 139 (1901).

898 *a*. **Gymnasura semilutea.**

Nudaria semilutea, Wileman, Entom. xliv. p. 110 (1911).

Fore wing with vein 10 stalked with 11.

♂. Head, thorax, and abdomen white, the tegulæ with brown patches, a brown band behind the tegulæ and patch on dorsum of thorax; fore tibiæ brown, the fore and mid tarsi, except at base, and the extremity of hind tarsi brown. Fore wing white, the

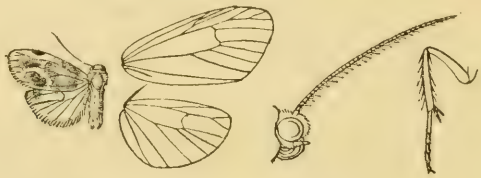

Fig. 248.—*Gymnasura semilutea*, ♂. ¾.

area from near base to end of cell fulvous yellow; its outer edge excurved below costa; a postmedial black spot on costa; diffused black-brown postmedial patches above and below middle shading to brown on terminal area. Hind wing white with diffused pale brown subapical patch.

Hab. Formosa, Kanshirei (*Wileman*), 2 ♂. *Exp.* 16 millim. Type † ♂ in Coll. Wileman.

898 *b*. **Gymnasura taprobana.**

Gymnasura taprobana, Hmpsn. A. M. N. H. (7) viii. p. 184 (1901).

Fore wing with vein 11 free; male with a small postmedial tuft of scales below costa.

♂. Ochreous; abdomen whitish above except anal tuft. Fore wing with a fuscous subbasal spot on costa; an ill-defined antemedial line excurved below costa and not reaching inner margin; an oblique medial line diffused inwards to the antemedial line at

middle and slightly angled inwards in submedian fold; two points on discocellulars; postmedial, subterminal, and terminal series of points. Hind wing thinly scaled, the subcostal area tinged with

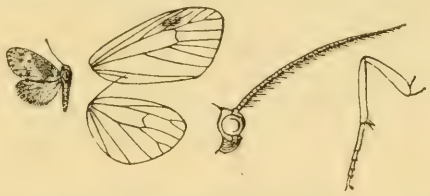

Fig. 249.—*Gymnasura taprobana*, ♂. ½.

fuscous; faint traces of a diffused medial line; a discoidal spot; the termen tinged with fuscous.

Hab. Ceylon, Matelé (*Pole*), 1 ♂ type. *Exp.* 18 millim.

Genus **PRINASURA**.

Type.

Prinasura, Hmpsn. A. M. N. H. (7) xi. p. 349 (1903) ..... *pyrrhopsamma*.

Proboscis fully developed; palpi porrect to just beyond frons; antennæ of male ciliated; hind tibiæ with two pairs of spurs; abdomen clothed with rough hair. Fore wing rather short and broad, clothed with hair-like scales; veins 3 and 5 from near angle of cell; 6 from below upper angle; 7, 8, 9 stalked; 10 free; 11 anastomosing with 12. Hind wing with veins 3 and 5 from angle of cell; 4 absent; 6, 7 stalked; 8 from middle of cell.

In key differs from *Barsinella* in the hind wing having vein 5 from angle of cell.

898 *c*. **Prinasura pyrrhopsamma**.

Prinasura pyrrhopsamma, Hmpsn. A. M. N. H. (7) xi. p. 350 (1903).

♂. Orange-fulvous; antennæ and legs above blackish. Fore wing with black hair mixed with the orange; diffused dentate antemedial, medial, and postmedial black lines obtusely angled on

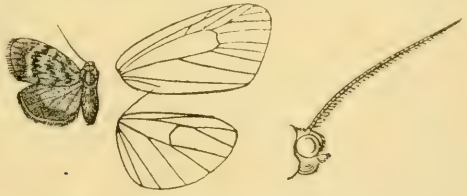

Fig. 250.—*Prinasura pyrrhopsamma*, ♂. ½.

median nervure; traces of a subterminal line; a terminal series of black points. Hind wing with fuscous black terminal band, broad at costa, narrowing to a point at tornus.

Hab. N. S. Wales, Sydney (*Olliff*), 1 ♂ type. *Exp.* 24 millim.

*899 *a*. Asura truncata.

Zygænosia truncata, Roths. Nov. Zool. xx. p. 204 (1913).

Fore wing of male very narrow, the costa lobed near base, the termen very oblique, excised below apex and excurved at middle; hind wing with the termen excised towards tornus.

♂. Head and thorax dark reddish brown; shoulders with orange patches; tarsi whitish except at extremities; abdomen orange, the extremity and ventral surface dark reddish brown. Fore wing

Fig. 251.—*Asura truncata*, ♂. ½.

orange; some dark reddish brown suffusion on basal costal area and at base of inner margin; an antemedial striga from costa; a patch at middle of costa; a small oblique black-brown discoidal lunule; the terminal area dark reddish brown, its inner edge arising from costa above end of cell, touching the discoidal lunule, then oblique to vein 4 and inwardly oblique to inner margin. Hind wing orange; the terminal area dark reddish brown, rather broad at costa, narrowing to a point at tornus.

Hab. German N. Guinea, Astrolabe Bay (*Wahnes*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

*899 *b*. Asura variabilis. (Plate XXXVIII. fig. 33.)

Zygænosia variabilis, Roths. Nov. Zool. xx. p. 205 (1913).

♂. Head and thorax fulvous orange, the metathorax with black-brown patch; antennæ black-brown; palpi and legs dark reddish brown; abdomen black-brown, the ventral surface orange except the anal tuft. Fore wing fulvous orange; the costal edge black towards base, a subbasal black point in cell and short streak on base of inner margin; the terminal area black-brown, its inner edge arising on costa just beyond middle, then excurved and slightly sinuous to inner margin. Hind wing fulvous orange; the terminal area black-brown, rather broad at costa, narrowing to a point at tornus.

Ab. 1. Fore wing with antemedial black-brown line, excurved to median nervure, then incurved and slightly excurved below submedian fold.

Ab. 2. Fore wing with round black discoidal spot, a black-brown postmedial line oblique from costa above end of cell to beyond

upper angle, angled outwards at vein 4, then incurved to tornus, the terminal area orange except the costa and cilia with a subterminal series of round black-brown spots on veins 6 to 2, the spot on vein 5 minute.

Hab. Mysol (*Kühn*), type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

*899 *c*. **Asura marginata**. (Plate XXXVIII. fig. 34.)

Asura marginata, Roths. Nov. Zool. xx. p. 208 (1913).

Head, thorax, and abdomen black-brown, the frons and shoulders orange; palpi and legs yellow, the fore tibiæ and tarsi at extremities blackish; ventral surface of abdomen yellow except at extremity. Fore wing orange; the costa black towards base expanding into subbasal and antemedial triangular patches, the former with spot below it on inner margin and the latter below the cell; a medial black band, excurved below costa and cell and incurved in cell; the costal area from the medial band and the terminal area glossy black-brown with strongly curved inner edge. Hind wing orange with black terminal band narrowing to a point at tornus.

Hab. Dutch N. Guinea, Geelvink Bay, Suer Mefor (*Doherty*), type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 20, ♀ 24 millim.

*900 *a*. **Asura semivitrea**. (Plate XXXVIII. fig. 35.)

Eutane semivitrea, Roths. Nov. Zool. xx. p. 216 (1913).

♂. Head, thorax, and abdomen black-brown, the frons, tegulæ, and patches on shoulders orange-yellow; fore coxæ and mid and hind tarsi except at extremities yellow; abdomen with lateral yellow patches at base, the anal tuft white below and the claspers yellow at tips. Fore wing black-brown; an orange subbasal band from just below costa to just above inner margin; an orange antemedial line from just below costa to just above inner margin, expanding somewhat at extremities; a small elongate medial spot below costa and triangular patch below the cell; a wedge-shaped mark with its base at discal fold in end of cell and its apex on vein 1; a postmedial spot below costa and line from just below it to above inner margin; a small subapical spot and larger subterminal spots at discal fold and from below vein 3 to above vein 1. Hind wing orange with a semihyaline fascia below the cell; a terminal black band, broad at costa and expanding on inner margin to middle; the underside with the black on costa extending to middle.

♀. Mesothorax with pair of orange spots, the anal tuft orange; fore wing with the subterminal spots larger; hind wing without semihyaline fascia below the cell.

Hab. Queensland, Mackay, type † ♂ ♀ in Coll. Rothschild, Kuranda (*Dodd*). *Exp.* ♂ 22, ♀ 26–28 millim.

*901 *a*. **Asura pseudojosiodes.** (Plate XXXVIII. fig. 36.)

Asura pseudojosiodes, Roths. Nov. Zool. xx. p. 210 (1913).

♂. Head and thorax orange-yellow; antennæ black; vertex of head and tegulæ with black spots; upper edge of patagia black; the prothorax with black patch; hind tibiæ with blackish streaks on outer side towards extremities; abdomen black-brown with slight yellowish dorsal lines towards extremity and the ventral surface yellow. Fore wing with the basal two-thirds orange-yellow, the apical third black-brown; the costa and inner margin black-brown; a subbasal black point below costa and short streak below the cell; an incurved antemedial black line produced outwards above inner margin to the black terminal area; an oblique series of slight dentate orange marks on the veins from below costa beyond middle to above tornus; a lunulate orange subterminal patch between veins 7 and 4. Hind wing black-brown; the underside with yellow spot on middle of costa and some yellow irroration below middle of cell.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 40 millim.

*901 *b*. **Asura habrotis.** (Plate XXXIX. fig. 1.)

Asura habrotis, Meyr. P. Linn. Soc. N.S.W. (2) i. p. 748 (1886).

Distinct from *bipars*.

Hab. Tasmania, type † ♂ in Coll. Meyrick. *Exp.* 26 millim.

902 *a*. **Asura melanoxantha**, n. sp. (Plate XXXIX. fig. 2.)

♀. Head, thorax, and abdomen black, the last with the ventral surface yellow. Fore wing fuscous black; a broad orange-yellow medial band from subcostal nervure in end of cell to inner margin, its upper edge rounded, its inner edge slightly sinuous. Hind wing fuscous black with yellow patch from costa extending into end of cell, the patch on underside extending on costal area from near base to beyond middle.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), 2 ♀ type. *Exp.* 30 millim.

*904 *a*. **Asura mimetica.** (Plate XXXIX. fig. 3.)

Asura mimetica, Roths. Nov. Zool. xx. p. 212 (1913).

♂. Head and thorax scarlet; black points on frons and between antennæ which are black-brown; shoulders, upper edge of patagia, and prothorax with fuscous black streaks, the metathorax with fuscous black patch; tibiæ with fuscous rings near extremities; abdomen fuscous brown, the anal tuft and lateral streaks towards extremities scarlet. Fore wing scarlet; a fuscous fascia on costa

near base, subbasal point in cell, and band just beyond it from cell to inner margin; a fuscous antemedial band somewhat bent inwards to costa and outwards to inner margin, its outer edge angled outwards on median nervure to the medial fuscous band which is somewhat bent inwards to costa; a small fuscous discoidal spot connected by a streak on median nervure with the medial band; postmedial band fuscous, excurved beyond upper angle of cell, its inner edge angled inwards at lower angle of cell to the discoidal spot, its outer edge connected with a quadrate subterminal patch from costa to discal fold; the termen fuscous with waved inner edge, connected above discal fold with the subterminal patch, expanding into a small quadrate patch between veins 5 and 4 and emitting an oblique spur from tornus. Hind wing fuscous brown. Underside of fore wing with the fuscous markings more diffused and confluent; hind wing with scarlet postmedial spot on costa.

Hab. Solomon Is., Tugela I. (*Woodford*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

904 *b*. **Asura pectinata.** (Plate XXXIX. fig. 4.)

Asura pectinata, Beth.-Baker, A. M. N. H. (8) vii. p. 537 (1911).

♂. Head, thorax, and abdomen yellow tinged with scarlet; antennæ with the branches black; fore and mid tibiæ black at extremities. Fore wing yellow suffused with scarlet; the costal area fuscous towards base; two antemedial series of small fuscous spots, the outer conjoined by a patch in cell to the medial line which is incurved in cell; a discoidal lunule; postmedial line formed by a series of fuscous spots conjoined in parts, oblique to vein 6, then somewhat dentate and incurved below vein 4; a subterminal series of small fuscous spots, slightly incurved at discal fold. Hind wing yellow tinged with scarlet.

♀. Fore wing with the spots of the lines somewhat more conjoined; cilia fuscous.

Hab. Cameroons, Ja R., Bitje, 2 ♂; Angola, N'Dalla Tando (*Ansorge*), type † ♂, ♀ in Coll. Bethune-Baker. *Exp.* ♂ 18, ♀ 24 millim.

904 *c*. **Asura amabilis.** (Plate XXXIX. fig. 5.)

Asura amabilis, Roths. Nov. Zool. viii. p. 424 (1901).

♂. Head and thorax orange; palpi scarlet; antennæ scarlet with the branches black; upper part of frons, vertex of head, mesothorax, shoulders, and patagia with black points; fore legs and streaks on mid tibiæ scarlet, the fore tibiæ with black spot and the extremity of tarsi black; abdomen orange dorsally suffused with fuscous except at base and extremity, the sides and base of ventral surface deep black. Fore wing bright yellow, three black points at base; eight irregularly waved scarlet lines, a diffused subbasal, two curved antemedial, two medial excurved in cell, the

outer double at discocellulars and conjoined at angles of cell to the inner of the two postmedial lines which are angled outwards at vein 6; a maculate subterminal line expanding into patches at costa and tornus and emitting streaks to termen at veins 6 and 4; a maculate terminal band. Hind wing deep yellow.

Hab. Solomon Is., Isabel I. (*Meek*), 1 ♂. *Exp.* 30 millim. Type † ♂ in Coll. Rothschild.

*904 *d.* **Asura albigrisea.** (Plate XXXIX. fig. 6.)

Zygænosia albigrisea, Roths. Nov. Zool. xx. p. 204 (1913).

♂. Head, thorax, and abdomen brown mixed with whitish; antennæ brown. Fore wing creamy white; some brown suffusion at base; the terminal area reddish brown from costa beyond middle to inner margin towards tornus, its inner edge incurved to end of cell. Hind wing creamy white; the inner margin suffused with brown; the cilia reddish brown; the underside with some brown at apex.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

906 *a.* **Asura conflua,** insert (syn.) :—

Asura liparidia, Roths. Nov. Zool. xx. p. 206 (1913).

Br. N. Guinea, Kumasi R. (*Meek*), type † ♂, ♀ in Coll. Rothschild.

The spelling *confina*, Cat. Lep. Phal. B.M. ii. p. 563, is a misprint.

*906 *b.* **Asura pallida.** (Plate XXXIX. fig. 7.)

Asura pallida, Roths. Nov. Zool. xx. p. 209 (1913).

♂. Head and thorax very pale yellow, the patagia with brown spots; antennæ brownish; fore tibiæ with black band near extremity; abdomen yellowish white. Fore wing very pale yellow; a small subbasal brown spot below the costa; an antemedial brown band angled outwards in submedian fold and connected by a streak with the postmedial band; a small oblique discoidal spot; postmedial band brown, emitting fasciæ towards termen on veins 6 and 4 and strongly incurved below vein 4. Hind wing yellowish white; the underside with slight brownish subapical spot.

Hab. Dorey (*Doherty*). type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

906 *c.* **Asura rhodina.** (Plate XXXIX. fig. 8.)

Asura rhodina, Roths. Nov. Zool. xii. p. 469 (1905).

♂. Head and thorax scarlet; hind legs pale yellow; abdomen greyish clothed with pale yellow hair tinged with scarlet. Fore

wing scarlet, the costal area to beyond middle and the veins beyond the cell yellow; a large diffused fuscous antemedial patch from below costa to inner margin, confluent on median nervure with the diffused fuscous postmedial band, which arises below costa, its outer edge excised at discal fold and angled outwards on vein 4, then incurved; cilia yellow. Hind wing yellow tinged with scarlet.

Hab. Br. N. Guinea, Angabunga R. (*Meek*), 1 ♂. *Exp.* 20 millim. Type † ♂ in Coll. Rothschild.

*907 *a*. **Asura trizonata**. (Plate XXXIX. fig. 9.)

Asura trizonata, Roths. Nov. Zool. xx. p. 208 (1913).

♂. Head and thorax pale yellow; antennæ brownish; fore legs with the extremities of the tibiæ and tarsi brown; abdomen yellowish white. Fore wing pale yellow, the costal edge brown towards base; a subbasal brown point below costa; a narrow antemedial brown band angled outwards in submedian fold to the medial brown band which is confluent with a discoidal spot, then incurved and at inner margin confluent with the curved postmedial band; a brown subterminal band, oblique towards costa, then confluent with the postmedial band leaving small yellow spots in the interspaces and produced as streaks almost to termen on veins 6, 4, and 1. Hind wing yellowish white with a diffused brownish subapical spot and small spot at extremity of vein 4.

Hab. Gt. Ké I. (*Kühn*), type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

908. **Asura nubifascia**, insert:—

Ab. *homogena*, Seitz, Gr. Schm. pal. ii. p. 59 (1910),

for ab. 2.

*908 *a*. **Asura arenaria**. (Plate XXXIX. fig. 10.)

Asura arenaria, Roths. Nov. Zool. xx. p. 205 (1913).

♂. Head and thorax very pale yellow; palpi brown at tips; fore tibiæ on inner side and tarsi at extremities brown; abdomen yellowish white. Fore wing pale yellow, the costal edge black-brown to towards apex. Hind wing yellowish white. Underside of fore wing tinged with brown except the inner area.

Hab. Br. N. Guinea, Kumusi R. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

*909 *a*. **Asura albidorsalis**. (Plate XXXIX. fig. 11.)

Asura albidorsalis, Wileman, Entom. xlvii. p. 161 (1914).

♂. Head, thorax, and abdomen brown mixed with white; antennæ brown. Fore wing brown with a slight cupreous gloss and

irrorated with white; a white patch at base of inner area conjoined below vein 1 to an antemedial patch and followed by a medial patch; a white line from costa above angle of cell, slightly sinuous to lower angle of cell, then incurved and below submedian fold oblique, dentate, and conjoined to the white medial patch; a maculate whitish subterminal line from costa to vein 2, excurved and slight at middle. Hind wing pale brown: the underside with faint brown shade from costa to lower angle of cell defined on outer side by whitish.

♀. Fore wing with the medial white line double to median nervure, the two lines conjoined by streaks enclosing spots of the ground-colour below costa and in upper and lower ends of cell.

Hab. Formosa, Rantizan (*Wileman*), type † ♂, ♀ in Coll. Wileman. *Exp.* ♂ 34, ♀ 36 millim.

*910*a*. **Asura ocnerioides.** (Plate XXXIX. fig. 12.)

Asura ocnerioides, Roths. Nov. Zool. xx. p. 211 (1913).

Head and thorax white suffused with orange-yellow; antennæ black; fore femora at extremities, the tibiæ, and tarsi except at base blackish, the mid and hind tarsi blackish at extremities; abdomen white, the terminal segments black. Fore wing white with the costal edge black. Hind wing white, rather thinly scaled. Underside of fore wing with the apical area and the termen and cilia to vein 4 blackish.

Ab. 1. Fore wing with oblique slightly excurved fuscous line from just beyond upper angle of cell to above vein 1 before middle.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 20, ♀ 24 millim.

911. **Asura lutara.**

Larva. Piepers, Tijd. v. Ent. xlvii. p. 157, pl. 10. f. 10, *a*, *b*.

911*a*. **Asura peloa.** (Plate XXXIX. fig. 13.)

Lyclene peloa, Swinh. A. M. N. H. (7) xiv. p. 420 (1904).

Yellow; fore tibiæ and tarsi and abdomen towards extremity in male tinged with fuscous. Fore wing with the costal edge black towards base; two black points in base of cell; a slight subbasal fuscous streak below costa and bar below the cell; antemedial line angled outwards in cell, then oblique and sinuous; a black discoidal point with another above it below the costa; postmedial line very highly and irregularly dentate, produced to points at veins 6 and 3; a subterminal series of black spots, those on veins 7, 6, 3 nearer termen. Hind wing pale yellow.

Hab. Sumatra, Padang, 1 ♂, 1 ♀ type. *Exp.* ♂ 20, ♀ 26 millim.

913. **Asura dasara,** insert (syn.) :—

Asura undulata, Swinh. A. M. N. H. (7) xi. p. 501 (1903).

Assam, Khásis, type ♂.

913 *a*. **Asura calamaria**, tr. from no. 986 and insert (syn.) :—

Asura calamaria, mediopuncta, Roths. Nov. Zool. xx. p. 211 (1913), ♀, nec ♂.

The male has the discoidal spot of fore wings small and brownish, the underside with the costal area fuscous brown to middle, the discal area tinged with fuscous brown.

*913 *b*. **Asura mediopuncta.** (Plate XXXIX. fig. 14.)

Asura calamaria, mediopuncta, Roths. Nov. Zool. xx. p. 211 (1913), ♂, nec ♀.

♂. Head and thorax orange-yellow; antennæ ringed with black towards base and tinged with fuscous towards tips; vertex of head with black point; shoulders and patagia with black spots, the prothorax with pair of black spots; fore legs suffused with black, the mid tibiæ and tarsi black with orange rings near base of tibiæ and at base of tarsi, the hind tibiæ towards extremities and extremities of tarsi black; abdomen pale orange-yellow dorsally suffused with fuscous on medial segments. Fore wing orange-yellow; the costal edge black towards base; a small black spot at base of costa and subbasal spot in cell; a small discoidal spot. Hind wing pale orange-yellow with some brownish suffusion in the interspaces just beyond the cell and in those of inner area. Underside of fore wing with the costa black to middle and with three oblique striæ from costa beyond middle, the whole disk suffused with fuscous from near base to well beyond middle, the outer edge of the fuscous area angled outwards at veins 6 and 4.

Hab. Assam, Khásis, type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

915 *a*. **Asura chrysomela.**

Asura chrysomela, Hmpsn. A. M. N. H. (7) xv. p. 438 (1905).

Fore wing of male with the costa highly arched just beyond middle, the upper angle of cell much produced.

Fig. 252.—*Asura chrysomela*, ♂. ½.

♂. Black; head, greater part of tegulæ, shoulders, front of pectus,

fore legs except part of tibiæ, extremities of mid and hind femora, hind coxæ, and anal tuft orange. Fore wing with broad orange medial band from subcostal nervure to inner margin, its inner edge extending to costa and sinuous, its outer angled outwards at vein 4. Hind wing with orange medial patch on costal area.

♀. Fore wing with the orange band very broad from costa to inner margin, its outer edge angled at veins 6 and 4; hind wing with very broad orange-yellow band from medial part of costa to tornus.

Hab. Solomon Is., Choiseul I. (*Meek*), 1 ♂, 1 ♀ type. *Exp.* ♂ 30, ♀ 36 millim.

*915 *b*. **Asura reducta**. (Plate XXXIX. fig. 15.)

Asura chrysomela, reducta, Roths. Nov. Zool. xx. p. 206 (1913).

♂. Head orange, the antennæ black; thorax and abdomen black-brown with orange patches on shoulders; fore legs orange, the tibiæ above and the tarsi at extremities black; mid and hind legs black-brown, the femora at extremities, tibiæ at base, and tarsi except at extremities orange; anal tuft orange. Fore wing black-brown with orange band from end of cell to inner margin where it narrows to a point, its outer edge slightly angled outwards at veins 4 and 2; the extremities of the veins slightly streaked with white except towards tornus. Hind wing black-brown with a wedge-shaped yellow patch from middle of costa extending into end of cell.

♀. Fore wing with the orange band extending to costa and much broader, its inner edge curved, its outer excurved from below costa to inner margin, no white streaks on the veins of terminal area; hind wing with broad yellow band from middle of costa to just above tornus, its inner edge incurved, its outer excurved.

Hab. Solomon Is., New Georgia I. (*Meek*), type † ♂ in Coll. Rothschild, Vella Lavella I. (*Meek*). *Exp.* ♂ 28–32, ♀ 36 millim.

915 *c*. **Asura pyraula**, trans. from no. 931.

Fore wing of male with fringe of long hair on medial part of

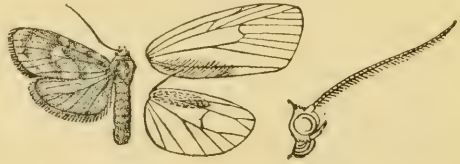

Fig. 253.—*Asura pyraula*, ♂. $\frac{1}{1}$.

inner margin on underside; hind wing with elongate patch of androconia below costa on upperside.

*915 *d*. **Asura insularis**. (Plate XXXIX. fig. 16.)

Asura insularis, Roths. Nov. Zool. xx. p. 212 (1913).

Head and thorax crimson, the vertex of head with minute dark streak; fore tibiæ with fuscous band near extremities; abdomen pale crimson, dorsally greyish towards base. Fore wing crimson with some yellowish at end of cell and on the veins beyond the cell; the costal edge fuscous towards base; a fuscous point at base of cell, subbasal bar across the cell and some fuscous below base of cell; a fuscous antemedial line, excurved to median nervure, angled inwards at submedian fold and outwards at vein 1; a narrow sinuous medial band connected by a streak at upper angle of cell with the postmedial line, which is oblique to vein 4 and angled inwards at submedian fold; a diffused fuscous subterminal shade, its outer edge angled outwards to near termen at veins 6 and 4; the costa towards apex and cilia fuscous black. Hind wing pale flesh-pink, the patch of androconia in male ochreous brownish. Underside of fore wing pale crimson, the costa towards apex and cilia blackish.

Hab. Louisiade Is., St. Aignan I. (*Meek*), type † ♂ in Coll. Rothschild; D'Entrecasteaux Is., Goodenough I. (*Meek*). *Exp.* ♂ 32, ♀ 38 millim.

915 *e*. **Asura pyrostrota**, n. sp. (Plate XXXIX. fig. 17.)

♂. Head, thorax, and abdomen orange-yellow suffused with scarlet, the patagia with slight fuscous points at base. Fore wing orange-yellow with diffused scarlet streaks in the interspaces especially on terminal area, the costal edge fuscous; some subbasal fuscous points on costal area; antemedial line rather diffused, fuscous, excurved in the cell and above inner margin; medial line diffused, fuscous, oblique to discal fold, then rather inwardly oblique and incurved at vein 1; postmedial line rather diffused, fuscous, somewhat dentate, oblique to vein 6, excurved to vein 4, then incurved; a subterminal series of fuscous streaks in the interspaces, extending to near termen below veins 6 and 4; cilia fuscous black. Hind wing yellowish suffused with pale crimson; cilia ochreous tinged with brown.

♀. Patagia without fuscous points; fore wing with the fuscous markings obsolescent.

Hab. Solomon Is., Kulambangra I. (*Meek*), 1 ♂, 1 ♀ type. *Exp.* ♂ 26, ♀ 28 millim.

915 *f*. **Asura analoga**. (Plate XXXIX. fig. 18.)

Asura metascota, analogus, Roths. Nov. Zool. xx. p. 213 (1913).

♂. Head, thorax, and abdomen pale orange-scarlet, the ventral surface deeper scarlet. Fore wing orange-scarlet; a blackish point at base of costa, a subbasal streak on costa, point in cell, and

wedge-shaped mark below the cell; a waved blackish antemedial line, conjoined at costa, in cell, and on vein 1 with the sinuous medial line, which again is conjoined by a streak at upper angle of cell to the postmedial line, which is oblique to vein 4, then somewhat incurved and waved; a diffused irregular subterminal line conjoined below costa and at middle to the postmedial line and angled outwards to near termen at veins 6 and 4, then somewhat incurved and ending at tornus; the costa towards apex, termen, and cilia blackish. Hind wing yellow-buff with fuscous terminal band, rather broad at costa and narrowing to a point at vein 1. Underside of fore wing pale scarlet, the terminal half of costa and terminal area fuscous.

♀. Patagia with small black spots; fore wing with the fuscous markings somewhat reduced, and less conjoined.

Hab. Solomon Is., Isabel I. (*Meek*), 2 ♂, Guadalcanar I. (*Meek*), 2 ♂. *Exp.* ♂ 28, ♀ 32 millim. Type † ♂, ♀ in Coll. Rothschild.

915*g*. **Asura cancellata.**

Miltochrista cancellata, Pag. Zoologica, xii. 29. p. 62, pl. ii. f. 27 (1900).
Asura crocota, Hmpsn. Cat. Lep. Phal. B.M. ii. p. 450, pl. xxxi. f. 5, ♂, nec ♀.
Miltochrista quadrifasciata, Roths. Nov. Zool. xx. p. 214 (1913).

♂. Head, thorax, and abdomen pale orange-scarlet; tegulæ and metathorax with paired fuscous spots. Fore wing pale orange-scarlet with rather deeper scarlet streaks in the interspaces; a blackish point at base of costa and subbasal point in the cell; antemedial line fuscous, excurved in the cell and at vein 1 and incurved in submedian interspace; a rather diffused fuscous medial line, slightly angled outwards at subcostal nervure, then oblique; postmedial line rather diffused, fuscous, excurved from below costa to vein 4, then incurved; a rather diffused fuscous subterminal line, angled outwards to near termen at veins 6 and 4, then incurved; cilia pale yellow. Hind wing yellowish tinged with scarlet. Underside of fore wing and costal area of hind wing pale scarlet.

Hab. German N. Guinea, type † ♂ in Coll. Rothschild; Louisiade Is., St. Aignan I. (*Meek*), 1 ♂; New Britain. *Exp.* 24 millim.

947. **Asura crocota.** (Plate XXXIX. fig. 19),

will probably also belong to this section.

*916*a*. **Asura irregularis.** (Plate XXXIX. fig. 20.)

Miltochrista irregularis, Roths. Nov. Zool. xx. p. 215 (1913).

♀. Head, thorax, and abdomen white, the vertex of head with black spot; antennæ brownish; fore tibiæ with brown band near extremity. Fore wing white, the costa except towards base and termen tinged with pink; the costal area suffused with black

towards base; short subbasal blackish streaks below the cell and above inner margin; a curved antemedial blackish line; a slightly incurved medial blackish line; a black discoidal spot; postmedial line blackish, arising from costa just beyond the medial line, strongly bent outwards below costa, then highly and irregularly dentate and oblique to inner margin just beyond the medial line, a curved series of black spots beyond it on the veins. Hind wing white tinged with pink. Underside of fore wing wholly tinged with pink.

Hab. Hainan, Youboi, type † ♀ in Coll. Rothschild. *Exp.* 20 millim.

*919 *a*. **Asura punctata.** (Plate XXXIX. fig. 21.)

Asura punctata, Roths. Nov. Zool. xx. p. 207 (1913).

♂. Head, thorax, and abdomen yellow, the patagia with black points; fore and mid tibiæ with black bands. Fore wing orange-yellow; a subbasal black point in the cell; small blackish spots in cell and above and below submedian fold before the curved antemedial series of six small blackish spots; a medial series of five small blackish spots, angled inwards in the cell to the antemedial series and angled inwards in submedion fold; a small black discoidal spot; a very highly and irregularly dentate postmedial line, more strongly angled outwards at veins 7, 6, 4; a subterminal series of eight small black spots, the spot in discal fold minute and further from termen; cilia brown. Hind wing yellow with terminal black-brown band narrowing to tornus. Underside of fore wing with oblique antemedial blackish line from costa to median nervure, the postmedial and subterminal markings diffused; hind wing with yellow line on the terminal band towards costa.

Hab. Assam, Khásis, type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

924 *a*. **Asura obliquilinea.** (Plate XXXIX. fig. 22.)

Lyclene obliquilinea, Swinh. A. M. N. H. (7) vii. p. 467 (1901).

♀. Head and thorax orange-yellow; vertex of head and shoulders with black points; abdomen greyish dorsally. Fore wing orange-yellow; a black point at base; an antemedial series of fuscous points, excurved below costa, then oblique and with points before it above and below median nervure; a medial line oblique from costa to above vein 1, then bent outwards; a black discoidal point; the postmedial line highly and irregularly dentate; a subterminal series of black points, the one on vein 4 nearer termen. Hind wing pale yellow.

Hab. Formosa, Kanshirei (*Wileman*), 2 ♀; Assam, Jaintia Hills, 1 ♀ type. *Exp.* 28 millim.

*925 *a*. **Asura isabellina.** (Plate XXXIX. fig. 23.)

Asura avernalis, isabellina, Roths. Nov. Zool. xx. p. 213 (1913).

♂. Head, thorax, and abdomen orange-scarlet; palpi with the extremity of 2nd joint black; antennæ blackish except at base; vertex of head with minute blackish streak; tegulæ with blackish bars; patagia with curved blackish fasciæ; pro- and metathorax with paired blackish spots; tibiæ with black band near extremities, the tarsi black at tips. Fore wing scarlet; a fuscous black spot at base of cell and subbasal band from costa to vein 1, conjoined on costa and inner margin to a curved antemedial band, connected by streaks on the veins with a sinuous medial band, which again is connected by a streak at upper angle of cell and oblique bar below end of cell with the somewhat sinuous postmedial band; the scarlet spot in end of cell with some yellow on it; a fuscous subterminal band confluent except at costa and inner margin with the postmedial band, emitting streaks to termen at veins 6 and 4 and ending at tornus; the costa toward apex, termen, and cilia fuscous black. Hind wing fuscous brown, the base and inner area with a yellowish tinge. Underside of fore wing with the basal half pale scarlet, a fuscous medial band from costa to below the cell, the rest of wing fuscous with some scarlet spots below costa and before termen; hind wing with the basal costal area tinged with scarlet, a postmedial scarlet spot on costa.

Hab. Solomon Is., Islets near Isabel I. (*Webster*), type † ♂ in Coll. Rothschild. *Exp.* 34 millim.

925 *b*. **Asura bougainvillei.** (Plate XXXIX. fig. 24.)

Asura avernalis, bougainvillei, Roths. Nov. Zool. xx. p. 213 (1913).

♀. Head, thorax, and abdomen orange-scarlet; palpi with some black at sides; antennæ blackish except at base; vertex of head with blackish spot; tegulæ with blackish bars; patagia with curved blackish band; pro- and metathorax with paired blackish spots; tibiæ with black band near extremities, the tarsi black at tips. Fore wing scarlet; the costa blackish towards base; a curved black subbasal line from costa to vein 1; a curved greyish fuscous antemedial band edged with black, conjoined in cell and at vein 1 to a sinuous medial band, which is connected by a streak at upper angle of cell and an angle on median nervure with the postmedial band, which is excurved beyond the cell and angled inwards below the cell to join the medial band; the scarlet spot left at end of cell with yellow centre; an irregular subterminal band, its inner edge dentate to or to near the postmedial band and its outer edge emitting streaks at veins 6 and 4 to termen, ending at tornus; the costa towards apex, termen, and cilia blackish. Hind wing yellow-buff; a terminal fuscous band with irregular inner edge from apex to vein 1; the inner margin

and tornus tinged with scarlet. Underside of fore wing scarlet with fuscous spot at middle of costa, the terminal area fuscous with dentate inner edge and some scarlet spots before termen; hind wing with the costal area suffused with scarlet.

Hab. Solomon Is., Bougainville I. (*Meek*), type † ♀ in Coll. Rothschild; Admiralty Is. (*Meek*), 1 ♀. *Exp.* 34 millim.

*925 *c.* **Asura floridensis.** (Plate XXXIX. fig. 25.)

Asura avernalis, floridensis, Roths. Nov. Zool. xx. p. 213 (1913).

♀. Head and thorax orange-scarlet; palpi with some blackish near tips; antennæ blackish except at base; vertex of head with blackish spot; tegulæ with blackish bars; patagia with curved blackish marks; pro- and metathorax with curved blackish patches; tarsi blackish at tips; abdomen yellowish tinged with scarlet, the ventral surface scarlet. Fore wing scarlet; the costal area blackish towards base, a blackish spot at base of cell and subbasal line from the dark costal area to inner margin; a curved fuscous black antemedial band conjoined in cell to a medial band expanding in the cell and with its outer edge angled outwards just below the cell; a fuscous black postmedial band excurved beyond the cell and angled inwards below it; some yellow in end of cell; an irregular fuscous black subterminal band, its inner edge incurved below the costa, then dentate, its outer edge angled outwards to near termen at veins 6 and 4, ending at tornus; the costa towards apex, termen, and cilia blackish. Hind wing flesh-pink; the termen fuscous from apex to vein 1, conjoined to a subapical spot, a spot at vein 4, and oblique mark from vein 2. Underside of fore wing scarlet with faint diffused medial and postmedial bands and the markings of terminal area as above; hind wing pale scarlet with fuscous postmedial spot below the costa and more complete subterminal series of spots conjoined to the fuscous on termen.

Hab. Solomon Is., Florida I. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 38 millim.

*926 *a.* **Asura aureorosea.** (Plate XXXIX. fig. 26.)

Miltochrista aureorosea, Roths. Nov. Zool. xx. p. 225 (1913).

♂. Head and thorax orange-yellow, the patagia and prothorax with paired fuscous spots; fore tibiæ with black band at extremities, the tarsi black at extreme tips; abdomen yellow, dorsally tinged with scarlet except at base of dorsum. Fore wing orange-yellow, the inner half tinged with scarlet except at base, the terminal area scarlet; black points at base of costa and cell and a subbasal point in the cell; antemedial line fuscous, oblique to middle of cell and slightly angled inwards in submedian fold and to inner margin; medial line fuscous, slightly waved, strongly excurved at median nervure and angled inwards at vein 1; postmedial line

fuscous, diffused and slightly waved, excurved to vein 4 and angled inwards in submedian fold to the medial line, a series of diffused fuscous streaks beyond it on the veins, the streaks on veins 6 and 4 extending to termen; the costa towards apex and cilia fuscous. Hind wing yellow suffused with scarlet; the costa towards apex and cilia except at tornus fuscous. Underside yellow tinged with scarlet; fore wing with postmedial black spot on costa, the terminal area suffused with fuscous; hind wing with the terminal area tinged with fuscous towards apex.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

*926 *b*. **Asura coccineotermen.** (Plate XXXIX. fig. 27.)

Miltochrista coccineotermen, Roths. Nov. Zool. xx. p. 225 (1913).

♀. Head and thorax yellow, the patagia, pro- and metathorax with paired brownish spots; abdomen yellowish white, the ventral surface yellow. Fore wing yellow, the terminal area scarlet; basal fuscous points on costa and in cell and a subbasal point in cell; a minutely dentate antemedial fuscous line angled outwards in the cell; a dentate medial fuscous line strongly bent outwards at middle; a small discoidal spot; a strongly excurved and minutely dentate fuscous postmedial line with the blackish subterminal line just beyond it, incurved below costa and angled outwards to termen at veins 6 and 4; the costa towards apex and a terminal line black; cilia fuscous. Hind wing yellowish white, the termen and cilia tinged with brown from apex to vein 2. Underside yellowish white; fore wing with the terminal area fuscous with a scarlet tinge before it and pale scarlet marks on it in the interspaces.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 22–26 millim.

*926 *c*. **Asura hieroglyphica.** (Plate XXXIX. fig. 28.)

Asura hieroglyphica, Roths. Nov. Zool. xx. p. 207 (1913).

♂. Head and thorax yellow, the antennæ brownish except towards base, the patagia, pro- and metathorax with paired black spots; fore tibiæ with black band, the tarsi black at extremities; abdomen yellow, dorsally whitish towards base. Fore wing yellow; the costal edge black towards base; a subbasal black spot in the cell; antemedial line black, curved; medial line black, excurved below costa and angled inwards to the antemedial line in cell and at vein 1; the medial area crimson towards inner margin; postmedial line black, angled inwards to upper angle of cell and below the cell to near origin of vein 2, excurved beyond the cell and above inner margin, a series of crimson marks beyond it

in the interspaces with blackish streaks between them on the veins except towards costa to the dark subterminal line, which arises below costa, is angled outwards at veins 6 and 4 and to tornus, and with dark suffusion before it on inner area. Hind wing pale yellow. Underside of fore wing with diffused dark band before the subterminal line.

Hab. Dutch N. Guinea, Arfak Mts., Ninay Valley, type † ♂ in Coll Rothschild. *Exp.* 30 millim.

*928 *a*. Asura intensa. (Plate XXXIX. fig. 29.)

Miltochrista intensa, Roths. Nov. Zool. xx. p. 226 (1913).

♂. Head and thorax deep crimson with bluish black markings, the frons with T-shaped mark, the vertex of head with streak, the base of tegulæ black, the shoulders with streaks, the patagia with curved mark, the dorsum of thorax with streak, and the pro- and metathorax with paired spots; tibiæ with black band at extremities, the tips of tarsi black; abdomen crimson with some brownish on dorsum towards base. Fore wing deep crimson, with bluish black markings; some fuscous suffusion on basal area; the costa black towards base; points in cell at and near base; antemedial line strongly excurved below costa, then oblique and slightly sinuous, confluent in the cell with the oblique medial line, from which the obliquely excurved postmedial line arises at subcostal nervure, slight blackish streaks beyond it on the veins extending to near termen at veins 6 and 4 and with slight fuscous suffusion between them; the costa towards apex and cilia blue-black. Hind wing pale crimson, the cilia blackish towards apex. Underside of fore wing with the costal area towards apex and terminal area to vein 2 blackish with crimson streaks on the veins; hind wing with the apical area suffused with blackish.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 32 millim.

*928 *b*. Asura dinava.

Asura dinava, Beth.-Baker, Nov. Zool. xi. p. 426, pl. v. f. 38 (1904).

♂. Head and thorax dull crimson with black streak on frons and vertex of head and bands at base of tegulæ and on meso-thorax; legs crimson with the sides of coxæ black, the tibiæ with black bands; abdomen pinkish flesh-colour. Fore wing dull crimson, the basal and postmedial areas suffused with fuscous; the base of costa black; a black point in base of cell; antemedial line indistinct, excurved below costa, then oblique; an oblique slightly waved medial line; postmedial line obsolete except from lower angle of cell to inner margin where it is indistinct, waved;

faint traces of a subterminal line; cilia black. Hind wing pale yellowish, the costal and terminal areas tinged with crimson except at tornus.

Hab. Br. N. Guinea, Dinawa, 4000′ (*Pratt*), type † ♂ in Coll. Bethune-Baker. *Exp.* 28 millim.

928 *c*. **Asura hæmachroa.** (Plate XXXIX. fig. 30.)

Asura hæmachroa, Hmpsn. A. M. N. H. (7) xv. p. 438 (1905).

♂. Head, thorax, and abdomen crimson, vertex of head, tegulæ, patagia, metathorax and extremities of fore tibiæ with fuscous points. Fore wing crimson; three black points at base followed by a slight streak in submedian fold; the lines rather broad, fuscous slightly defined on each side by ochreous; the antemedial line acutely angled outwards in the cell, then oblique and sinuous; the medial line strongly angled outwards on median nervure, then incurved; the postmedial line very oblique from costa to vein 4 where it is angled outwards, then strongly angled inwards in submedian fold; a subterminal series of fuscous spots on an ochreous ground, slightly angled outwards at veins 6 and 4. Hind wing paler crimson.

Hab. Solomon Is., Bougainville I. (*Meek*), 2 ♂ type. *Exp.* 18 millim.

*928 *d*. **Asura postbicolor.** (Plate XXXIX. fig. 31.)

Asura postbicolor, Roths. Nov. Zool. xx. p. 211 (1913).

♂. Head and thorax deep orange with slight blackish marks; fore tibiæ and tarsi blackish towards extremities; abdomen orange with dorsal blackish patch from near base to near extremity. Fore wing deep orange; the costa black-brown towards base; a subbasal black spot in cell; antemedial obliquely-placed blackish spots in and below the cell and above inner margin; an oblique slightly excurved medial blackish band, and a blackish discoidal spot; a postmedial blackish band, forming a patch at costa, excurved below costa and at middle almost to termen, then incurved; the termen and cilia blackish. Hind wing black-brown with the base orange. Underside of fore wing with the terminal half suffused with blackish leaving some orange spots before termen; hind wing with the orange extending on costa to middle.

Hab. Timor, Dili (*Doherty*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

929. **Asura sexualis,** insert (syn.):—

Miltochrista effulgens, Pag. Zoologica, xii. 29. p. 62, pl. ii. f. 30 (1900).

New Britain, type † ♂ in Coll. Rothschild.

929 *a*. **Asura coccineoflammea.** (Plate XXXIX. fig. 32.)

Asura coccineoflammeus, Roths. Nov. Zool. xx. p. 210 (1913).

Head and thorax yellow suffused with crimson; fore tibiæ with fuscous band near extremities, the tarsi fuscous at extremities; pectus yellow; abdomen yellow, ventrally tinged with crimson. Fore wing yellow suffused with crimson; a subbasal black point in cell; antemedial line slight, blackish and somewhat dentate, excurved below costa; medial line indistinct, diffused, blackish, excurved and somewhat dentate; postmedial line diffused, blackish, excurved and somewhat dentate; subterminal line formed of short blackish streaks, more produced towards termen on veins 6 and 4; cilia blackish with minute streaks before them on the extremities of the veins. Hind wing ochreous yellow; the underside with the costal area tinged with crimson.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♂ ♀ in Coll. Rothschild; Br. N. Guinea, Dinawa (*Pratt*), 1 ♂. *Exp.* ♂ 30, ♀ 32 millim.

*929 *b*. **Asura fasciolata.** (Plate XXXIX. fig. 33.)

Asura fasciolata, Roths. Nov. Zool. xx. p. 212 (1913).

♂. Head and thorax crimson; palpi black at tips; antennæ fuscous except basal joint; metathorax with fuscous spot; femora at extremities, the tibiæ, and tarsi suffused with brown; abdomen whitish, tinged with crimson except at base of dorsum. Fore wing yellow with crimson streaks in the interspaces; black points at base of costa and vein 1 and a small subbasal spot in the cell; a dentate blackish antemedial line. oblique to median nervure and angled inwards in submedian fold; a curved medial blackish band with slightly waved edges; a dentate blackish postmedial line, oblique to vein 4, then inwardly oblique; a diffused fuscous subterminal shade, its outer edge angled outwards to near termen at veins 6 and 4; a terminal series of small black spots; cilia chequered black and yellow at base, fuscous at tips. Hind wing pale flesh-pink. Underside of fore wing pale crimson with diffused fuscous subterminal line from costa to vein 4.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

929 *c*. **Asura biagi.** (Plate XXXIX. fig. 34.)

Miltochrista biagi, Beth.-Baker, Nov. Zool. xv. p. 196 (1908).

Head and thorax scarlet; antennæ brownish except at base; fore and mid tibiæ with fuscous bands at extremities, the tarsi fuscous at extremities; abdomen pale crimson. Fore wing scarlet

with yellow streaks on the veins and in submedian fold; fuscous points at base of costa and in cell; antemedial line fuscous, somewhat dentate, oblique from costa to median nervure; medial line fuscous, somewhat dentate, excurved; postmedial line fuscous, dentate, oblique from costa to vein 6, then inwardly oblique; subterminal line fuscous, diffused towards costa, then formed by streaks on the veins produced to near termen on veins 6 and 4; a terminal series of black points; cilia fuscous. Hind wing pale crimson, the cilia yellowish.

Hab. Br. N. Guinea, Biagi, type † ♀ in Coll. Bethune-Baker, Sogeri, 1 ♂. *Exp.* 32 millim.

*929 *d*. **Asura pyrrhauloides.** (Plate XXXIX. fig. 35.)

Asura pyrrhauloides, Roths. Nov. Zool. xx. p. 212 (1913).

♀. Head and thorax crimson, the vertex of head, outer edge of tegulæ, shoulders, and patagia with fuscous spots, the prothorax with pair of fuscous spots; abdomen pale crimson, whitish towards base, the ventral surface deeper crimson. Fore wing crimson with yellow streaks on the veins; fuscous fasciæ on costal area and below the cell from base to the antemedial fuscous line, which is angled outwards on subcostal nervure and vein 1 to the medial band, which is greyish fuscous defined on outer side by blackish, slightly angled outwards below costa, then oblique and sinuous; a postmedial fuscous band diffused on outer side, angled inwards below the costa to join the medial band, then oblique to vein 4 and angled inwards at vein 2, the area beyond it almost entirely suffused with fuscous leaving some crimson below the costa and before termen; the costa beyond the postmedial band and cilia fuscous black. Hind wing pale flesh-pink. Underside of fore wing crimson, a fuscous mark at middle of costa, some marks below costa towards apex, and the termen tinged with fuscous to vein 4.

Hab. Dutch N. Guinea, Setekwa R., Snow Mts. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 32 millim.

*929 *e*. **Asura miltochristæmorpha.** (Plate XXXIX. fig. 36.)

Asura miltochristæmorpha, Roths. Nov. Zool. xx. p. 214 (1913).

Head and thorax yellow, the vertex of head, tegulæ, and patagia with fuscous points; fore tibiæ with fuscous band near extremities; abdomen yellow suffused with scarlet except at base of dorsum. Fore wing yellow tinged with scarlet, the terminal area suffused with scarlet; basal and subbasal black points in the cell; a subbasal fuscous line, excurved in cell and at vein 1 and angled inwards in submedian fold; a medial fuscous line, oblique to median nervure, then incurved and somewhat dentate; a rather diffused and somewhat dentate postmedial line, oblique to vein 4, then incurved and

angled inwards in submedian fold to near the medial line; a diffused somewhat dentate curved subterminal line, angled outwards at veins 6 and 4 to near termen; the costa towards apex, termen, and cilia blackish. Hind wing pale crimson, the cilia blackish from apex to vein 2. Underside of fore wing pale scarlet, the terminal area suffused with fuscous; hind wing yellow tinged with scarlet.

Hab. Dutch N. Guinea. Setekwa R., Snow Mts. (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 24, ♀ 30 millim.

929*f*. Asura metascota. (Plate XL. fig. 1.)

Asura metascota, Hmpsn. A. M. N. H. (7) xv. p. 438 (1905).

Head and thorax orange-scarlet with slight fuscous spots on vertex of head, tegulæ, patagia, thorax, and extremities of tibiæ and tarsi; abdomen fuscous with the extremity scarlet. Fore wing scarlet with three black points at base and fuscous subbasal patches below costa and cell; an incomplete antemedial line angled strongly outwards in cell, then oblique and slightly angled inwards in submedian fold, more or less connected by fuscous suffusion with the similar somewhat waved and diffused medial line; postmedial line oblique from costa to vein 3, then inwardly oblique and angled inwards in submedian fold and more or less connected by fuscous streaks with the diffused subterminal line, which is angled outwards on veins 6 and 4 and inwards in submedian fold; cilia fuscous. Hind wing uniform fuscous; the underside with some red suffusion on basal half of costal area.

Ab. 1. Fore wing suffused with fuscous leaving some red at base, some ante- and postmedial points, three medial spots, and some irregular terminal marks.—Bougainville I.

Hab. Solomon Is., Choiseul I. (*Meek*), 1 ♂, 1 ♀ type, Bougainville I. (*Meek*), 1 ♂. *Exp.* ♂ 30, ♀ 36 millim.

*929*g*. Asura feminina. (Plate XL. fig. 2.)

Asura metascota, feminina, Roths. Nov. Zool. xx. p. 213 (1913).

♂. Head and thorax orange-scarlet; abdomen fuscous, the extremity orange-scarlet. Fore wing scarlet; black points at base of costa and cell; subbasal black points on costa and in cell and a wedge-shaped mark below the cell; an antemedial blackish line, oblique towards costa and angled inwards in submedian fold, conjoined in cell and at vein 1 to a medial band with waved edges, which again is conjoined by a streak at upper angle of cell to the diffused postmedial line, which is oblique to vein 4, then somewhat dentate; the terminal area suffused with fuscous; the cilia fuscous. Hind wing fuscous. Underside of fore wing pale scarlet, the terminal half of costa and terminal area suffused with fuscous; hind wing with some scarlet on basal costal area.

♀. Fore wing with the postmedial line narrower and more dentate below vein 4, the fuscous on terminal area forming a diffused band with rather dentate inner edge and emitting streaks to termen on veins 6 and 4.

Hab. Solomon Is., Vella Lavella I. (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 30, ♀ 32 millim.

*929 *h*. **Asura miltochristina.** (Plate XL. fig. 3.)

Asura miltochristina, Roths. Nov. Zool. xx. p. 212 (1913).

Head and thorax crimson; antennæ fuscous except towards base; tibiæ with fuscous black bands near extremities and the tarsi fuscous black at extremities; abdomen pale crimson, greyish at base. Fore wing crimson; the costal edge fuscous towards base; a fuscous point at base of costa and subbasal point in the cell; antemedial and medial fuscous lines, the former excurved in cell and confluent with the latter, angled inwards at submedian fold and outwards on vein 1 to the latter, which is angled inwards to meet it; a diffused fuscous postmedial line, obliquely excurved from costa to vein 3, then incurved and connected by a streak in submedian fold with the medial line; a diffused curved fuscous subterminal shade, emitting streaks on the veins to termen; cilia fuscous black. Hind wing pale crimson, the cilia fuscous towards apex. Underside of fore wing pale crimson, the costa with fuscous medial and postmedial marks, and the terminal area tinged with fuscous to vein 4.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 28, ♀ 30 millim.

930. **Asura agraphia**, insert:—

Hypocrita septemmaculata, Heyl. C. R. Soc. Ent. Belge. xxxv. p. ccccxiii (1891),

which has priority.

930 *a*. **Asura anæmica.** (Plate XL. fig. 4.)

Asura anæmica, Hmpsn. A. M. N. H. (8) viii. p. 405 (1911).

♂. Head and thorax pale yellow mixed with pale red-brown; abdomen yellowish white. Fore wing very pale red-brown; some pale yellowish at base of inner margin; slight antemedial yellowish marks on costa and below the cell; an irregular yellowish patch on inner medial area and an irregular mark beyond and below lower angle of cell; traces of some small subterminal yellowish spots and of slight spots on termen above and below vein 2. Hind wing yellowish white, the apex faintly tinged with brown.

Hab. Dutch N. Guinea, Fak-fak (*Pratt*), 2 ♂ type. *Exp.* 20–26 millim.

930 *b*. **Asura citrinopuncta.** (Plate XL. fig. 5.)

Asura citrinopuncta, Roths. Nov. Zool. xx. p. 206 (1913).

♂. Head and thorax yellow; palpi and antennæ brownish; a brown spot between antennæ; patagia brown except at shoulders; prothorax with pair of brown spots, the metathorax with brown spot; fore femora brown above, the tibiæ brown except at base, the tarsi brown at extremities; abdomen yellow, dorsally whitish towards base. Fore wing yellow with waved brown-edged greyish bands; a subbasal band from costa to submedian fold; antemedial band angled outwards in cell and confluent with the curved medial band, which is angled inwards to meet it, and also confluent with it in submedian fold; postmedial band connected with the medial band by streaks in discal fold and on median nervure, excurved below vein 6, then oblique to inner margin, its outer edge connected in places with the subterminal band which is angled outwards to termen at veins 6 and 4; a blackish terminal line with minute streaks at the extremities of the veins; cilia dark brown. Hind wing pale yellow, the cilia dark brown except towards tornus. Underside of fore wing with blackish antemedial spot on costa, the terminal area suffused with brown, with curved yellow postmedial line and some slight marks before termen; hind wing with subterminal brownish bar from costa.

♀. Hind wing sometimes with brownish subapical spot.

Hab. Dutch N. Guinea, Setekwa R., Snow Mts. (*Meek*); Br. N. Guinea, Kumusi R. (*Meek*), 1 ♂. *Exp.* 20–22 millim. Type † ♂, ♀ in Coll. Rothschild.

932. **Asura quadrilineata**, insert (syn.):—

Asura basitessellata, Roths. Nov. Zool. xx. p. 206 (1913).

Br. N. Guinea, Kumusi R. (*Meek*), type † ♂, ♀ in Coll. Rothschild.

*933 *a*. **Asura quadrifasciata.** (Plate XL. fig. 6.)

Asura quadrifasciata, Roths. Nov. Zool. xx. p. 209 (1913).

♂. Head and thorax orange-yellow, the patagia edged with black above; fore and mid tibiæ black towards extremities and the tarsi ringed with black except at base; abdomen orange-yellow, the terminal half blackish above and below. Fore wing orange-yellow; the costa black towards base; some black points below base of cell and subbasal spots below costa and cell; a strongly excurved antemedial black line; medial line black, excurved below costa and at middle, angled inwards in the cell to the antemedial line and angled inwards at submedian fold; a small discoidal spot; postmedial line black, emitting a streak at upper angle of cell

almost to the medial line, slightly angled outwards at veins 6 and 4, then emitting an oblique streak to lower angle of cell, and angled inwards at submedian fold almost to the medial line; subterminal line black, sinuous, emitting wedge-shaped streaks to termen at veins 6 and 4; the costa towards apex and cilia black. Hind wing orange-yellow, the terminal area broadly black with sinuous inner edge. Underside of fore wing with oblique black mark from middle of costa, the postmedial and subterminal lines diffused and confluent, leaving a yellow spot on costa; hind wing with confluent yellow spots on termen from apex to vein 2.

Hab. N. Celebes, Toli-toli (*Frühstorfer*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

934 *a*. **Asura atricraspeda**, n. sp. (Plate XL. fig. 7.)

Head and thorax orange-yellow, the former with fuscous spot on vertex; tegulæ and patagia with black spots; tibiæ and tarsi black at extremities; abdomen greyish ochreous. Fore wing orange-yellow; an oblique fuscous subbasal line from costa to submedian fold connected by a fascia on costa with the curved waved fuscous antemedial line; a broad oblique fuscous medial line with waved edges; a discoidal lunule; postmedial line fuscous, oblique towards costa, then dentate, strongly incurved below vein 4; a dentate fuscous subterminal line, incurved below costa, angled outwards at veins 6 and 4 to near termen, then oblique; cilia black. Hind wing yellow, the cilia tipped with fuscous at apex.

Hab. Gold Coast, Bibianaha (*Spurrell*), 1 ♂, 2 ♀ type; Kumasi (*Whiteside*), 1 ♀. *Exp.* ♂ 18, ♀ 24 millim.

937 *a*. **Asura toxodes**. (Plate XL. fig. 8.)

Asura toxodes, Hmpsn. A. M. N. H. (7) xix. p. 233 (1907).

♂. Head and thorax pale ochreous slightly mixed with fuscous; antennæ and extremities of tibiæ fuscous; abdomen ochreous white. Fore wing pale ochreous; costal edge blackish on basal and terminal areas; a black point in base of cell; some fuscous in submedian fold; a highly curved antemedial line; a medial line angled inwards in cell; postmedial line confluent with the medial line at costa and inner margin and forming with it a bow-shaped mark, very oblique from costa to vein 6 and from 4 to inner margin; a very irregular subterminal line angled outwards at veins 6 and 4; a fine black terminal line. Hind wing pale semihyaline ochreous.

Hab. Andaman Is. (*G. Rogers*), 1 ♂ type. *Exp.* 24 millim.

940 *a*. **Asura neavi**, n. sp. (Plate XL. fig. 9.)

♂. Head and thorax orange-yellow; palpi black above towards tips; fore legs banded with black, the mid and hind tibiæ and tarsi at extremities black; abdomen yellow. Fore wing yellow with blackish markings edged with scarlet; the costal edge black towards base; a subbasal black point in cell; two dentate antemedial lines; medial line oblique to middle of cell where it is angled inwards, oblique and waved below the cell; a black discoidal striga; postmedial line dentate, bent outwards below the costa, then oblique; a subterminal series of small spots, curved inwards below the costa, the spot at vein 4 almost terminal. Hind wing pale yellow with small brown spots just before termen from apex to vein 2; the underside with curved postmedial brown line from costa to vein 2 and the subterminal spots more distinct.

Hab. Uganda, Entebbe (*Neave*), 1 ♂ type. *Exp.* 18 millim.

941. **Asura obliterata**, insert (syns.):—

Asura crenulata, Beth.-Baker, A. M. N. H. (8) vii. p. 537 (1911).
Asura xantha, Beth.-Baker, A. M. N. H. (8) vii. p. 537 (1911).
Miltochrista hieroglyphica, Beth.-Baker, A. M. N. H. (8) vii. p. 537 (1911).

Angola, N'Dalla Tando (*Ansorge*), type † ♂ *crenulata*, *xantha*, and *hieroglyphica* in Coll. Bethune-Baker. The type of *M. hieroglyphica* has vein 11 of fore wing curved and approximated to 12 but separate.

941 *a*. **Asura obsolescens**, n. sp. (Plate XL. fig. 10.)

Head and thorax yellow; the shoulders with black spots; fore legs banded with black, the mid and hind tarsi black at extremities; abdomen greyish ochreous. Fore wing yellow with a slight pink tinge, thinly scaled; subbasal black points on costa and in cell; two oblique waved pale brownish antemedial lines; an oblique waved pale brownish medial line; a small brownish discoidal spot; postmedial line pale brownish, dentate, angled outwards at veins 6 and 4, then strongly incurved; a subterminal series of small pale brownish spots, curved inwards below the costa, and the spot at vein 4 almost terminal. Hind wing pale yellow, thinly scaled.

Hab. Uganda, Ketoma (*Doggett*), 1 ♂, Mulema (*Doggett*), 1 ♀ type. *Exp.* ♂ 22, ♀ 26 millim.

942 *a*. **Asura chypsilon**, insert (syn.):—

Asura subcruciata, Roths. Nov. Zool. xx. p. 209 (1913).

N. Borneo, Mt. Mulu (*Hose*), type † ♂ in Coll. Rothschild.

*942 *b*. **Asura aroa.**

Asura aroa, Beth.-Baker, Nov. Zool. xi. p. 426, pl. v. f. 37 (1904).

♂. Head and thorax yellow strongly suffused with scarlet; abdomen yellow, whitish on dorsum. Fore wing yellow with diffused scarlet streaks in the interspaces; a slight black point in base of cell; an indistinct antemedial line, angled outwards in cell and on vein 1 and inwards in submedian fold; a slight medial line, oblique from costa to median nervure, then incurved; a slight postmedial line oblique from costa to vein 6 and incurved below vein 4; traces of a dentate subterminal line, oblique from costa to vein 6. Hind wing pale yellowish, the terminal area very slightly tinged with scarlet.

Hab. Br. N. Guinea, Aroa R. (*Meek*), type † ♂ in Coll. Bethune-Baker. *Exp.* 26 millim.

943. **Asura senara**, insert (syn.):—

Miltochrista sullia, Swinh. A. M. N. H. (7) vii. p. 468 (1901).

Larva. Piepers, Tijd. v. Ent. xlvii. p. 159.

Black with tufts of plumose hair from the sides and with thick hair throughout.

943 *a*. **Asura tricolor.** (Plate XL. fig. 11.)

Miltochrista tricolor, Wileman, Entom. xliii. p. 244 (1910).

♂. Head and thorax scarlet; a black point between antennæ, the patagia with black spots, the prothorax with pair of black points and the mesothorax with black patch; abdomen brownish white, the ventral surface tinged with scarlet. Fore wing scarlet with some yellow in the interspaces and more prominent patches in end of cell and three on subterminal area; small subbasal fuscous spots below costa and in and below the cell; an excurved fuscous antemedial band, confluent in the cell with an incurved medial band; an excurved postmedial band, dilated at middle and confluent at inner margin with the medial band, a series of spots beyond it produced as streaks on veins 6 and 4 to near termen. Hind wing pale crimson.

Hab. Formosa, Kanshirei (*Wileman*), 1 ♂. *Exp.* 26 millim. Type † ♂ in Coll. Wileman.

946 *a*. **Asura eldola.** (Plate XL. fig. 12.)

Lyclene eldola, Swinh. A. M. N. H. (7) vii. p. 468 (1901).

♂. Pale yellow; palpi blackish; vertex of head, shoulders, and patagia with blackish points; fore tibiæ and tarsi and streaks on

mid tibiæ blackish. Fore wing with blackish streaks at base; an antemedial line oblique from costa to median nervure where it is angled outwards to the medial line, then recurved and angled slightly outwards again on vein 1; the medial line inwardly oblique from costa to submedian fold, then excurved to join the postmedial line; a discoidal point; the postmedial line minutely waved, bent outwards between veins 6 and 3, then oblique; an irregularly dentate subterminal line emitting streaks to termen on veins 6 and 4.

Hab. Queensland, Kuranda (*Dodd*), 1 ♂, Duaringa, 1 ♂ type. *Exp.* 24 millim.

946 *b*. Asura flaveola.

Asura flaveola, Beth.-Baker, Nov. Zool. xi. p. 424, pl. v. f. 22 (1904).

Pale yellow; abdomen greyish at base. Fore wing with the costa brown at base; the antemedial line angled inwards below costa and acutely outwards in submedian fold, connected by streaks in cell and submedian fold with the medial line, which is slightly angled inwards in cell and strongly outwards below vein 3 and connected by a streak on vein 2 with the postmedial line; a brown spot at upper angle of cell connected by an oblique streak on vein 7 with the postmedial line, which is excurved between veins 6 and 4, then incurved; an oblique brown mark from costa before apex and short streaks on the veins beyond the postmedial line. Hind wing yellowish white.

Hab. Br. N. Guinea, Dinawa, 4000′ (*Pratt*), type † ♂ in Coll. Bethune-Baker; Goodenough I. (*Meek*), 2 ♀. *Exp.* 24 millim.

946 *c*. Asura percurrens, n. sp. (Plate XL. fig. 13.)

♂. Head and thorax yellow; antennæ brownish; fore tibiæ with a fuscous band at extremities; abdomen grey, the anal tuft and ventral surface yellow. Fore wing yellow; a small subbasal black spot in cell; antemedial line fuscous, angled outwards on median nervure, then oblique and excurved at vein 1; medial line fuscous, incurved below costa, angled inwards at median nervure and conjoined by a streak to the antemedial line, then excurved, and incurved at vein 1; postmedial line fuscous, angled inwards below costa, then excurved, slightly incurved at discal fold, angled inwards at submedian fold and connected by a short streak with the medial line, then bent outwards to tornus; subterminal line fuscous, incurved below costa, which it does not quite reach, strongly angled outwards to near termen at veins 6 and 4, incurved between those points to near the postmedial line and ending at vein 2 near the postmedial line. Hind wing pale yellow.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), 1 ♂ type. *Exp.* 24 millim.

*947 *a*. Asura sagittaria.

Asura sagittaria, Beth.-Baker, Nov. Zool. xi. p. 425, pl. v. f. 23 (1904).

♀. Pale yellow; tegulæ with black points; extremities of fore tibiæ and tarsi fuscous; abdomen greyish, yellowish at extremity and on ventral surface. Fore wing pale yellow; a black point at base; the base of costal edge black; antemedial line slightly angled outwards below costa and strongly in submedian fold, where it is connected by a black streak with the medial line, which is obliquely curved from costa to submedian fold, then excurved, traversed by a clavate mark in discal fold from beyond the antemedial line to a slight discoidal lunule; postmedial line minutely dentate, excurved from vein 7 to 4, then oblique, with streaks beyond it below veins 7 to 3 to the subterminal line, which is oblique below costa and dentate on veins 6, 4 and 1. Hind wing yellowish white.

Hab. Br. N. Guinea, Dinawa, 4000′ (*Pratt*), type † ♀ in Coll. Bethune-Baker. *Exp.* 30 millim.

*951 *a*. Asura brunneofasciata.

Asura brunneofasciata, Beth.-Baker, Nov. Zool. xi. p. 425, pl. v. f. 24 (1904).

♂. Pale yellow; fore femora and fore and mid tibiæ and tarsi at extremities fuscous. Fore wing with the base of costa dark brown; the antemedial line oblique from costa to median nervure, then connected by a broad fascia in submedian interspace with the postmedial band, which is slightly angled inwards in discal fold and strongly in submedian fold, a band formed of confluent streaks on the veins beyond it, angled outwards on veins 6 and 4. Hind wing pale yellow.

Hab. Br. N. Guinea, Dinawa, 4000′ (*Pratt*), type † ♂ in Coll. Bethune-Baker. *Exp.* 26 millim.

*951 *b*. Asura lutea. (Plate XL. fig. 14.)

Asura lutea, Beth.-Baker, Nov. Zool. xv. p. 196 (1908).
Graptasura mediofascia, Roths. Nov. Zool. xx. p. 204 (1913).

♂. Head and thorax yellow; palpi at tips and antennæ brown; fore tibiæ and tarsi brownish; abdomen yellowish white. Fore wing pale yellow; the costal edge brown to beyond middle; a slight diffused curved brown streak in medial part of submedian fold; a faint obliquely curved brown line from costa well beyond middle to lower angle of cell. Hind wing yellowish white.

♀. Fore wing without medial streak in submedian fold, the postmedial line excurved below costa, then oblique to submedian fold before middle.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Bethune-Baker, type † ♂ ♀ *mediofascia* in Coll. Rothschild. *Exp.* 24 millim.

953 *a*. Asura ochreomaculata.

Asura ochreomaculata, Beth.-Baker, Nov. Zool. xi. p. 424, pl. v. f. 26 (1904).

Head orange; antennæ brown; thorax brown, the tegulæ and patagia streaked with orange; legs orange banded with fuscous, the fore and mid femora suffused with crimson; abdomen orange with fuscous band before anal tuft, the ventral surface fuscous. Fore wing brown; a yellow point at base of cell; antemedial line double with crimson-tinged spots on it, angled outwards below costa, then oblique; large conical yellow medial patches on costa and inner margin, an oblique series of crimson spots defined by fuscous just beyond them, slightly incurved below upper angle of cell; a postmedial series of crimson spots defined by fuscous, incurved below vein 4; termen irregularly fuscous with wedge-shaped crimson spots at extremity of the veins. Hind wing yellow, the terminal area fuscous, narrowing to a point at tornus.

Hab Dutch N. Guinea, Fak-fak (*Pratt*), 1 ♀; Br. N. Guinea, Dinawa, 4000′ (*Pratt*), type † ♂ in Coll. Bethune-Baker. *Exp.* ♂ 30, ♀ 36 millim.

*953 *b*. Asura biplagiata. (Plate XL. fig. 15.)

Miltochrista biplagiata, Roths. Nov. Zool. xx. p. 216 (1913).

Head orange-yellow, the edges of frons and a spot on vertex of head black; antennæ black except basal joint; thorax dark red-brown, the edges of tegulæ, spots at base of patagia and patches at sides of mesothorax yellow, the metathorax with orange-red patch; pectus and legs brown, the fore coxæ, extremities of femora and base of tibiæ yellow tinged with red, the extremities of tibiæ, and the tarsi except at extremities, yellow; abdomen with the basal half orange-yellow, the terminal half black-brown with some yellow in anal tuft. Fore wing dark red-brown tinged with grey except on terminal area; a small subbasal black spot in cell with some yellow and scarlet points round it; antemedial line scarlet defined on each side by dark brown, strongly excurved below costa and incurved below submedian fold; yellow spots edged with scarlet and dark brown at middle of costa and inner margin; scarlet patches edged with dark brown above and below end of cell and a point in end of cell; a postmedial series of wedge-shaped scarlet marks edged with dark brown on the veins, the mark on costa

elongate and the series incurved below vein 4; a terminal series of rather wedge-shaped scarlet marks on the veins, slight towards apex. Hind wing with the basal half orange-yellow, the terminal half dark brown with diffused inner edge. Underside of fore wing dark brown, the basal inner area yellow, a slight yellow spot at middle of costa and some scarlet marks below costa towards apex.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* ♂ 32, ♀ 40 millim.

959. **Asura congerens**, insert (syn.):—

Asura roseogrisea, Roths. Nov. Zool. xx. p. 208 (1913).

Lr. Burma, type † ♂, ♀ in Coll. Rothschild.

963. **Asura ila**, insert (syn.):—

Asura unifascia, Roths. Nov. Zool. xx. p. 207 (1913).

Ceylon, Kandy, type † ♀ in Coll. Rothschild.

966 *a*. **Asura phantasma.** (Plate XL. fig. 16.)

Asura phantasma, Hmpsn. A. M. N. H. (7) xix. p. 233 (1907).

♂. Whitish ochreous; antennæ and fore legs in front fuscous. Fore wing with the base of costa black; a small black spot in base of cell; an indistinct antemedial series of spots strongly excurved in cell and less so below it, sometimes almost conjoined into a line; a medial line oblique from costa to subcostal nervure, then excurved, often almost obsolete; a small discoidal spot; a postmedial series of points, sometimes almost obsolete, those on veins 6 and 4 nearer termen; one or two points on termen sometimes present. Hind wing pale ochreous, the apex sometimes faintly tinged with fuscous.

Hab. Andamans (*G. Rogers*), 5 ♂ type. *Exp.* 18 millim.

967 *a*. **Asura acteola.** (Plate XL. fig. 17.)

Asura acteola, Swinh. A. M. N. H. (7) xi. p. 501 (1903).

♀. Head and thorax orange-yellow tinged with red; abdomen yellow. Fore wing pale crimson, the costal edge and cilia yellow; black points at base of costa and cell; an antemedial series of five irregularly placed black points; a fine medial line, slightly incurved at median nervure, then straight; a discoidal point; a subterminal series of short streaks on the veins, the streak on vein 5 displaced inwards, incurved below vein 4. Hind wing pale crimson, the cilia yellow.

Hab. Siam, Muok-Lek (*Frühstorfer*), 1 ♀ type. *Exp.* 16 millim.

*967 *b*. **Asura aureata**. (Plate XL. fig. 18.)

Asura lacteoflava, aureata, Roths. Nov. Zool. xx. p. 208 (1913).

♂. Head and thorax orange-yellow, the vertex of head and patagia with black spots; palpi black above; fore femora above and tibiæ and tarsi on inner side black; abdomen whitish, the anal tuft and ventral surface yellow. Fore wing orange-yellow; a black point at base of costa and the costal edge black to middle; a short subbasal black streak on subcostal nervure; minute oblique antemedial black streaks above and below submedian fold; a medial black point above the cell and oblique striga on upper discocellular; traces of an oblique incurved medial line; an oblique postmedial series of short fine black streaks on the veins, the streak on vein 5 nearer the cell; a terminal series of blacks points. Hind wing pale yellow.

Hab. Assam, Khásis, type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

*968 *a*. **Asura rosalia**, n. n. (Plate XL. fig. 19.)

Miltochrista rosacea, Roths. Nov. Zool. xx. p. 215 (1913), nec Leth.-Baker, 1904.

♂. Head whitish; thorax pale pink; palpi black at tips; pectus and legs yellowish; abdomen whitish, the ventral surface yellowish. Fore wing rose-pink; the costal edge black towards base; a small subbasal black spot in cell; antemedial black points below the cell and above inner margin and a point further from base above vein 1; medial line black, very oblique, from costa above end of cell to inner margin before middle; an oblique black striga on upper discocellular; a series of short black streaks on the veins, arising below costa beyond the medial line bent outwards below costa to towards termen, the streaks on veins 5, 3, 2, 1 further from the termen; a terminal series of black points; cilia yellowish. Hind wing semihyaline yellowish white. Underside of fore wing whitish tinged with pink, the costal area suffused with fuscous to beyond middle; hind wing with the costal area tinged with pink.

Hab. W. Java, type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

*968 *b*. **Asura mediofascia**. (Plate XL. fig. 20.)

Asura mediofascia, Roths. Nov. Zool. xx. p. 210 (1913).
Asura mediofascia, intensa, Roths. Nov. Zool. xx. p. 210 (1913).

Head and thorax yellow, the patagia with black points; fore tibiæ brown except towards base; abdomen yellow, dorsally whitish towards base. Fore wing yellow tinged with pink; the costal edge black towards base; a subbasal black point below costa; antemedial line formed of blackish spots, excurved below costa and above inner margin and incurved at middle; a slightly excurved

medial blackish band, and a black discoidal spot; postmedial line formed of blackish spots, excurved below costa, angled inwards at discal fold, excurved at middle almost to termen then incurved; a terminal series of blackish points. Hind wing semihyaline orange-yellow.

Ab. 1. *intensa*. Head, thorax, and fore wing strongly suffused with crimson, the last with punctiform terminal line; hind wing deeper orange with slight punctiform terminal line from apex to vein 2.

Hab. Sumbawa, Tambora (*Doherty*), type † ♂ in Coll. Rothschild; Bali (*Doherty*); Lombok, Sapit (*Frühstorfer*), type † ♀ *intensa* in Coll. Rothschild. *Exp.* 18–20 millim.

*969 *a*. Asura geminata.

Miltochrista geminata, Pag. Zoologica, xii. 29. p. 62, pl. ii. f. 22 (1900).

♂. Yellow; fore tibiæ with fuscous patch above. Fore wing with curved brown antemedial band, its outer edge angled on median nervure, in submedian fold emitting a tooth to near base and on outer side a streak to join the postmedial band, ending on inner margin near base; a curved brown postmedial band narrowing to costa, its outer edge slightly angled at veins 8, 6, and 4, oblique towards inner margin. Hind wing pale yellow.

Hab. New Britain (*Ribbe*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

970. Asura humilis.

Larva. Piepers, Tijd. v. Ent. xlvii. p. 160, pl. 10. f. 11.

Entirely clothed with thick grey-brown hair, the 7th and 8th somites with white hair, the 6th and 9th with black hair; head black.

*970 *a*. Asura ougarra. (Plate XL. fig. 21.)

Asura ougarra, Beth.-Baker, Nov. Zool. xv. p. 196 (1908).

♂. Head, thorax, and abdomen yellow. Fore wing yellow; a subbasal black point in cell; a broad curved antemedial pale red-brown band with waved edges; a broad pale red-brown postmedial band, its inner edge excurved at middle, its outer excurved at middle and angled outwards to near termen at veins 6 and 4. Hind wing very pale yellow.

Hab. Br. N. Guinea, Owgarra (*Meek*), type † ♂ in Coll. Bethune-Baker. *Exp.* 26 millim.

971 *a*. Asura orsova. (Plate XL. fig. 22.)

Asura orsova, Swinh. A. M. N. H. (7) xi. p. 501 (1903).

♂. Head, thorax, and abdomen orange-yellow; patagia with

black spots. Fore wing orange-yellow almost entirely suffused with crimson; the costal edge black towards base; black points at base of costa and cell; an antemedial band formed of more or less conjoined spots from below costa to above inner margin, oblique below the cell; a small discoidal spot; a postmedial series of diffused streaks on the veins, the streak on vein 5 not extending so far towards termen, incurved below vein 4. Hind wing yellow slightly tinged with crimson.

Hab. Siam, Muok-Lek (*Frühstorfer*), 1 ♂ type. *Exp.* 16 millim.

*971 *b*. Asura striata. (Plate XL. fig. 23.)

Asura striata, Wileman, Entom. xliii. p. 222 (1910).

♂. Head and thorax orange-yellow, the patagia with black spots at base and middle, the prothorax with pair of spots; palpi with some black at sides; fore and mid tibiæ with black bands; abdomen pale yellow. Fore wing orange-yellow; a black point at base of costa and subbasal point in cell; an antemedial black band formed of confluent streaks, expanding at costa, the streak below the cell extending more towards base, a black spot before it on inner margin; a postmedial series of black streaks on the veins, the streaks beyond the cell connected by a discoidal bar and the subapical mark tridentate; a terminal series of black points. Hind wing pale yellow.

Hab. Formosa, Kanshirei (*Wileman*), type † ♂ in Coll. Wileman. *Exp.* 22 millim.

*971 *c*. Asura strigatula. (Plate XL. fig. 24.)

Asura strigatula, Roths. Nov. Zool. xx. p. 209 (1913).

♂. Head and thorax yellow, the patagia with blackish spots; palpi black at sides towards tips; fore legs blackish on inner side; abdomen yellowish white, the ventral surface yellow. Fore wing yellow; the costal edge black towards base; a subbasal black point below costa; an oblique antemedial band formed by short dark brown fasciæ in the interspaces; a discoidal spot conjoined to a postmedial band formed by confluent dark brown streaks, its inner edge oblique and straight, its outer edge with longer streaks on veins 7, 6, and 4. Hind wing pale yellow; the underside with diffused subapical dark spot.

Hab. Assam, Khásis, type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

974. Asura eos.

Larva. Piepers, Tijd. v. Ent. xlvii. p. 160, pl. x. f. 12.

Entirely clothed with tufts of thick ochreous hair, the subdorsal and lateral tufts longer on the 1st, 2nd, and 3rd and the terminal

somites, the subdorsal tufts on 4th and 5th somites black; some long lateral white hairs.

Cocoon entirely clothed with ochreous hair.

979. **Asura discisigna**, insert (syn.) :—

Asura infumata, *rufotincta*, Roths. Nov. Zool. xx. p. 214 (1913).

Assam, Khásis, type † ♂, ♀ in Coll. Rothschild; like the form *aurantiaca*, but with the subterminal series of spots of the fore wing rather more complete in the male.

982. **Asura dharma**, insert (syn.) :—

Asura lacteoflava, Roths. Nov. Zool. xx. p. 208 (1913).

Punjab, Dalhousie, type † ♂, ♀ in Coll. Rothschild.

987 *a*. **Asura rosacea**. (Plate XL. fig. 25.)

Asura rosacea, Beth.-Baker, Nov. Zool. xi. p. 426 (1904).

♂. Bright rose-pink. Fore wing with slight brownish suffusion in and beyond end of cell; the costal edge fuscous at base and on terminal half; cilia fuscous. Hind wing slightly paler; the cilia fuscous except towards tornus.

Hab. Dutch N. Guinea, Mimica R. (*Wollaston*), 1 ♂; Br. N. Guinea, Dinawa, 4000′ (*Pratt*), type † ♂ in Coll. Bethune-Baker, Kumusi R. (*Meek*), 1 ♂, Sogeri, 1 ♂. *Exp.* 24 millim.

*990 *a*. **Asura asuroides**. (Plate XL. fig. 26.)

Melanæma asuroides, Roths. Nov. Zool. xx. p. 203 (1913).

♀. Head and thorax brown, the palpi except at tips, sides of frons, base of antennæ, vertex of head, tips of tegulæ and patagia and some marks on metathorax crimson; pectus, legs, and abdomen crimson, the extremities of tibiæ and tarsi black. Fore wing brown; a crimson streak on base of inner margin; conical medial crimson spots on costa and inner margin. Hind wing whitish tinged with crimson, the apex tinged with brown; cilia brown; the underside with the terminal half of costal area and the terminal area to vein 3 suffused with brown.

Hab. Dutch N. Guinea, Setekwa R., Snow Mts. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 20 millim.

990 *b*. **Asura fulvimarginata**. (Plate XL. fig. 27.)

Asura fulvimarginata, Hmpsn. A. M. N. H. (8) iv. p. 357 (1909).

♀. Head, tegulæ, and patagia orange-yellow, the vertex of head with slight dark streak; thorax and abdomen pale brown; antennæ

brown; hind tibiæ and tarsi yellowish. Fore wing pale red-brown, the costa and inner margin reddish yellow. Hind wing pale semi-hyaline red-brown.

Hab. Madras, Horsleykonda (*Campbell*), 1 ♀ type. *Exp.* 26 millim.

*991 *a*. **Asura unicolora.**

Asura unicolora, Beth.-Baker, Nov. Zool. xi. p. 425, pl. v. f. 25 (1904).

♂. Head and thorax yellow; fore femora, tibiæ, and tarsi at extremities fuscous; abdomen greyish, the anal tuft ochreous. Fore wing very pale yellow, the costa brown, darker towards base. Hind wing yellowish white.

Hab. Br. N. Guinea, Dinawa, 4000′ (*Pratt*), type † ♂ in Coll. Bethune-Baker. *Exp.* 22 millim.

992. **Asura uniformeola**, insert (syn.) :—

Tigrioides flavescens, Roths. Nov. Zool. xix. p. 218 (1912).

Br. N. Guinea, Kumusi R. (*Meek*), type † ♀ in Coll. Rothschild.

Larva. Piepers, Tijd. v. Ent. xlvii. p. 161.

Entirely clothed with thick tufts of black hair. Food-plant, *Musceus*.

Cocoon covered with black hair.

993. **Asura frigida**, insert (syn.) :—

Asura griseotincta, Roths. Nov. Zool. xx. p. 206 (1913).

S.W. Borneo, Pontianak, type † ♀ in Coll. Rothschild.

Genus **IONTHAS**.

	Type.
Ionthas, Turner, ined.	*ataracta*.

Proboscis absent; palpi short, porrect; antennæ of male with long branches; head, thorax, and abdomen clothed with rough hair; tibiæ with the spurs well developed. Fore wing with veins 3 and 5 from near angle of cell; 6 from just below upper angle; 7, 8 stalked, 9 absent; 10, 11 from cell. Hind wing with veins 3, 4 from angle of cell, 5 from well above angle; 6, 7 stalked; 8 from before middle of cell.

In key differs from *Miltochrista* in the proboscis being absent and the fore wing having vein 9 absent.

*1001 *a*. **Ionthas ataracta.**

Ionthas ataracta, Turner, ined.

♂. Head and tegulæ orange-yellow; palpi and antennæ brown; thorax and legs brown; abdomen orange, the ventral surface clothed with brown and orange hair. Fore wing grey-brown. Hind wing orange-yellow with terminal brown band, its inner edge angled outwards at vein 4 almost to termen. Underside of fore

wing with the inner area tinged with orange to middle, where it is joined by an obscure band from costa.

Hab. Queensland, Warwick, type † ♂ in Coll. Turner. *Exp.* 26 millim.

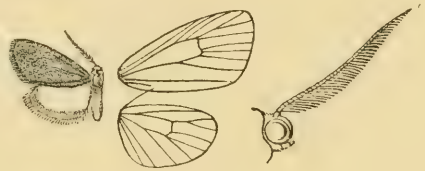

Fig. 254.—*Ionthas ataracta*, ♂. ½.

Genus **DIACONISIA**, nov.

Type, *D. ochraceorufa*.

Proboscis fully developed; palpi upturned, slender, reaching almost to vertex of head; antennæ of male ciliated; tibiæ with the spurs moderate. Fore wing rather narrow, the apex rounded, the termen evenly curved; vein 2 from beyond middle of cell, curved; 3 from long before angle; 5 from well above angle; 6 from below upper angle; 7, 8, 9 stalked, 7 from beyond 9; 10, 11 from cell, oblique. Hind wing with vein 2 from beyond middle of cell; 3, 4 stalked; 5 from well above angle; 6, 7 stalked; 8 from middle of cell.

In key differs from *Caprimima* in the fore wing having vein 2 curved.

*1001 *b*. **Diaconisia ochraceorufa.**

Melanæma ochraceorufa, Roths. Nov. Zool. xx. p. 203 (1913).

♂. Head and thorax yellow tinged with rufous, the tips of tegulæ, upper edge of patagia, and dorsum of thorax deeper rufous; fore and mid tibiæ and tarsi and the hind tarsi brown; abdomen yellow. Fore wing yellow, the costal edge rufous, the terminal

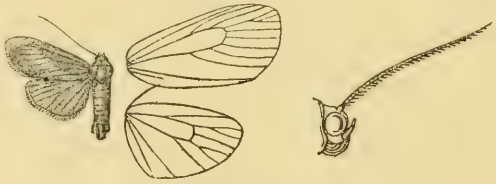

Fig. 255.—*Diaconisia ochraceorufa*, ♂. ½.

area suffused with rufous; the costal area pale yellow irrorated with red-brown obliquely from apex to inner margin near base and defined below by a rufous shade. Hind wing pale yellow. Underside of fore wing tinged with rufous.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

1007. **Miltochrista miniata**, insert:—

Ab. *flava*, Meyer, Insectenborse, xxiii. p. 88 (1906).
=Ab. *crogea*.

1009 *a*. **Miltochrista phæodonta**. (Plate XL. fig. 28.)

Miltochrista phæodonta, Hmpsn. A. M. N. H. (8) viii. p. 406 (1911).

Head and thorax pale ochreous yellow; vertex of head and shoulders with black points; fore tibiæ with fuscous band at extremities; abdomen ochreous white, fuscous towards extremity and on ventral surface. Fore wing ochreous; fuscous streaks on basal area below costa and cell and above and below vein 1, short towards inner margin; the costal edge black to the strongly excurved antemedial black line, which does not quite reach the inner margin; a slightly curved medial black line, approximated to the antemedial line below costa; postmedial line blackish, rather diffused, bent outwards below costa, then oblique and very highly dentate to above inner margin, some short black streaks beyond it below costa and a subterminal series of small blackish spots, Hind wing pale ochreous; a diffused pale fuscous postmedial line from costa to vein 2, slightly excurved below costa, then oblique; a faint fuscous subapical spot and subterminal bar towards tornus. Underside of fore wing with the basal half of costal area fuscous, a broad fuscous postmedial band except on inner area with slight streaks beyond it on the veins.

Hab. Sikhim (*Möller*), 2 ♂, 1 ♀ type. *Exp.* 22 millim.

1012 *a*. **Miltochrista vetusta**.

Miltochrista vetusta, Snell. Tijd. v. Ent. xlvii. p. 163, pl. xi. fig. 4 (1904).

Antennæ finely pectinate in both sexes, the branches shorter in female.

Head, thorax, and abdomen grey-brown. Fore wing grey-brown; the costa black at base; an oblique subbasal black mark below the cell; antemedial, medial, postmedial, and subterminal black lines which are thicker oblique and somewhat irregular towards costa, then fine and produced to minute teeth on inner side; a black discoidal point and terminal series of points. Hind wing uniform grey-brown.

Hab. W. Java, Preanger, 1 ♂. *Exp.* 26–32 millim.

*1012 *b*. **Miltochrista elongata**. (Plate XL. fig. 29.)

Miltochrista elongata, Roths. Nov. Zool. xx. p. 216 (1913).

Head, thorax, and abdomen dark red-brown mixed with some orange, the sides of frons, a bar above it, and streaks above antennæ orange; the tegulæ at tips and patches at base and tips of patagia orange; tibiæ at base and tarsi except at tips orange-

yellow. Fore wing dark red-brown mixed with orange-yellow; traces of a dark antemedial line, oblique from costa to vein 1 and defined on each side by yellow towards inner margin; diffused yellow marks in the interspaces beyond the cell before the indistinct dark postmedial line which is slightly defined on outer side by yellow, excurved from costa to vein 4, then oblique; some slight yellow streaks on the veins towards termen. Hind wing orange-yellow with black terminal band, broad at costa, narrowing to tornus. Underside of fore wing yellow, the costal and terminal areas black-brown; hind wing with the costal area black-brown.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 34, ♀ 38 millim.

*1014 *a*. **Miltochrista dentata.** (Plate XL. fig. 30.)

Miltochrista dentata, Wileman, Entom. xliii. p. 223 (1910).

♀. Head, thorax, and abdomen scarlet; antennæ black; fore tibiæ with black bands, mid and hind tibiæ with black streaks. Fore wing scarlet; subbasal black points in and below the cell; the costa black to the antemedial black line, which is angled outwards in the cell, then oblique; an oblique sinuous medial black line, the costa beyond it black; a postmedial black line, angled outwards beyond upper angle of cell, then incurved, very highly dentate, the teeth ending in small black spots; cilia black. Hind wing scarlet, the apical area strongly suffused with black and the rest of terminal area slightly suffused; cilia blackish. Underside of fore wing with irregular postmedial black patch below costa and subterminal spot on vein 4.

Hab. Formosa, Arizan (*Wileman*), type † ♀ in Coll. Wileman. *Exp.* 18 millim.

1017 *a*. **Miltochrista ocellata.** (Plate XL. fig. 31.)

Miltochrista ocellata, Hmpsn. A. M. N. H. (7) xix. p. 234 (1907).

♀. Head and thorax orange-yellow; patagia and prothorax with black spots; tibiæ banded with black, the last joint of tarsi black: abdomen greyish ochreous, the ventral surface blackish. Fore wing orange-yellow, small black spots at base of costa and cell; fuscous spots below costa, cell, and above vein 1 before the antemedial line, which is interrupted at submedian fold and angled inwards above inner margin; a large annulus at end of cell; postmedial line strongly bent outwards below costa, then highly and irregularly dentate, strongly incurved below vein 4 and conjoined to the antemedial line above and below submedian fold; a subterminal series of small spots on the veins. Hind wing yellow.

Hab. Ceylon, Ohiya (*de Mowbray*), 1 ♀ type. *Exp.* 40 millim.

*1021 *a*. **Miltochrista flavoplagiata.** (Plate XL. fig. 32.)

Miltochrista flavoplagiata, Roths. Nov. Zool. xx. p. 215 (1913).

♂. Head yellow with black spots on frons and vertex; the palpi black above; thorax yellow with large black patches occupying the greater part of tegulæ, patagia, meso- and metathorax; abdomen black with lateral yellow streaks. Fore wing black-brown; yellow streaks in basal half of cell and on base of vein 1 and a wedge-shaped subbasal patch below the cell, continued as a slight streak in submedian fold to below end of cell; a medial yellow spot below costa, small spot below the cell and large spot above inner margin; a series of slight yellow streaks in the interspaces beyond the cell; a small subterminal yellow spot below apex, quadrate spot at middle and rather dentate band between veins 4 and 1. Hind wing black-brown. Underside of fore wing with diffused yellowish in and below the cell and the yellow subterminal marks.

Ab. 1. Fore wing with the yellow markings reduced, no streaks on postmedial area.

♀. Fore wing with the yellow markings more extensive, defining a subbasal black spot in cell, an antemedial line angled outwards in cell then oblique, a postmedial line excurved below costa and angled inwards in submedian fold to the antemedial line, the medial area yellow with an elongate blackish spot in end of cell.

Hab. Sula Mangoli (*Doherty*), type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 28, ♀ 38 millim.

1027 *a*. **Miltochrista dohertyi.** (Plate XL. fig. 33.)

Miltochrista cuneonotata, ab. 1, Hmpsn. Cat. Lep. Phal. B.M. ii. p. 483.
Miltochrista dohertyi, Roths. Nov. Zool. xx. p. 215 (1913).

♂. Head and thorax scarlet, the vertex of head, tegulæ, and patagia with black points; abdomen scarlet, dorsally whitish towards base. Fore wing scarlet; blackish points at base on costa and below the cell and a subbasal point in cell; the antemedial area with diffused fuscous line from below costa to vein 1, produced to short streaks on subcostal and median nervures and angled inwards in submedian fold; antemedial line fuscous, excurved below costa, then oblique; medial line fuscous, oblique to discal fold where it is angled inwards to the antemedial line, then excurved and angled inwards in submedian fold; postmedial line fuscous, arising from costa at the medial line, excurved to vein 4, then incurved and joining the medial line at vein 1, the veins beyond it with fuscous streaks not reaching the termen, forking on veins 8, 7 and longer on veins 6 and 4; the costa towards apex and cilia pale fuscous. Hind wing yellowish tinged with pink. Underside of fore wing and costal area of hind wing pale scarlet.

♀. Fore wing without the line on antemedial area, the postmedial line not anastomosing with the medial line towards inner margin, the cilia pale yellow.

Hab. Singapore (*Ridley*), 1 ♂; Sumbawa, Tambora (*Doherty*), 1 ♂. *Exp.* 38 millim. Type † ♂, ♀ in Coll. Rothschild.

1029 *a*. **Miltochrista convexa.** (Plate XL. fig. 34.)

Miltochrista convexa, Wileman, Entom. xliii. p. 223 (1910).

♀. Head and thorax crimson; abdomen pale crimson. Fore wing crimson; the costal edge black; a black point in base of cell and subbasal point in cell with fuscous spot below it; an excurved antemedial fuscous line; a fuscous medial band, incurved in cell and connected with the antemedial line; a black discoidal point; a fuscous postmedial line arising on costa from the same point as the medial line, excurved beyond the cell, then incurved and connected with the medial line at submedian fold, a series of short black streaks beyond it, the streak on vein 6 longer and the streak on vein 4 extending to near termen; cilia black. Hind wing pale crimson; a diffused fuscous subapical spot; cilia black from apex to vein 3.

Hab. Formosa, Kanshirei (*Wileman*), 1 ♀. *Exp.* 26 millim. Type † ♀ in Coll. Wileman.

1029 *b*. **Miltochrista connexa.** (Plate XL. fig. 35.)

Miltochrista connexa, Wileman, Entom. xliii. p. 223 (1910).

♂. Head and thorax pale scarlet, the vertex of head with fuscous spot; fore tibiæ blackish in front; abdomen greyish ochreous. Fore wing scarlet; basal and subbasal black points in the cell; the costa black to the strongly excurved antemedial black line with some fuscous suffusion before it in and below the cell; an incurved medial line connected in the cell with the antemedial line; postmedial line excurved below costa, incurved to discocellulars, angled outwards at lower angle of cell, then oblique to submedian fold near the medial line, a series of black streaks beyond it, extending on vein 4 almost to termen; the costa towards apex and cilia black. Hind wing pale crimson with slight fuscous subapical spot and subterminal streak on vein 4; cilia blackish at apex.

Hab. Formosa, Arizan (*Wileman*), 2 ♂. *Exp.* 24 millim. Type † ♂ in Coll. Wileman.

*1037 *a*. **Miltochrista parameia.** (Plate XL. fig. 36.)

Miltochrista parameia, Roths. Nov. Zool. xx. p. 214 (1913).

♂. Head, thorax, and abdomen orange-yellow; antennæ blackish; metathorax with pair of black spots; legs banded blackish and white. Fore wing creamy white; some yellow at base; the

costal edge black towards base; black points at base of costa and vein 1 and a subbasal spot in the cell; a double curved antemedial series of rather bar-shaped black spots, below costa, below the cell and on vein 1; a medial series of three spots, the spot below the cell touching the outer antemedial series; a discoidal spot; the terminal area with broad black streaks on the veins leaving slight white streaks in the interspaces, the streaks longer towards costa, their bases running obliquely from costa above end of cell and confluent with the discoidal spot to vein 4, then somewhat incurved; cilia black. Hind wing creamy white, rather thinly scaled; a maculate blackish terminal band from apex to vein 1, narrow except at apex; cilia blackish at tips.

♀. Fore wing with all the black markings reduced, the medial spots separate from the antemedial series, the streaks on the veins of terminal area narrow and well separated from the discoidal spot, cilia white; hind wing with short streaks on the veins of terminal area, the cilia white at tips.

Hab. Tonkin, Montes Manson (*Frühstorfer*), type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 30, ♀ 36 millim.

1037 *b*. **Miltochrista citrona.** (Plate XLI. fig. 1.)

Miltochrista citrona, Hmpsn. A. M. N. H. (7) xix. p. 234 (1907).

♀. Head, thorax, and abdomen orange-yellow; antennæ and fore legs in front fuscous. Fore wing pale orange-yellow; small black spots on base of costa and in cell; antemedial part of costa streaked with black; a curved series of four wedge-shaped black spots before the curved maculate antemedial black line; traces of a curved orange medial line; a black discoidal spot; postmedial black line quadrately angled outwards between veins 6 and 4 with a series of strong black streaks on the veins from it to termen; cilia black. Hind wing pale orange-yellow with short black streaks on the veins towards apex; cilia blackish on apical half.

Hab. Singapore (*Ridley*), 1 ♀ type. *Exp.* 24 millim.

*1038 *a*. **Miltochrista coccinea.** (Plate XLI. fig. 2.)

Miltochrista coccinea, Roths. Nov. Zool. xx. p. 215 (1913).

♀. Head, thorax, and abdomen scarlet; vertex of head, patagia, and prothorax with paired black points; hind tibiæ with slight black mark in front near extremity. Fore wing scarlet; basal and subbasal black points in the cell; antemedial line black, strongly excurved in the cell to the medial line and oblique towards costa and inner margin; medial line black, incurved in the cell to the antemedial line; postmedial line black, arising on costa at the medial line, oblique to vein 6, inwardly oblique below vein 4 and connected with the medial line at submedian fold and inner margin, slight black streaks beyond it on veins 8 and 7 and longer streaks

on veins 6 and 4. Hind wing scarlet, the cilia blackish towards apex. Underside of fore wing with small black spot at middle of costa and subterminal streaks as above; hind wing with slight subterminal black streaks on veins 8, 7, 6.

Hab. Assam, Khásis, type † ♀ in Coll. Rothschild. *Exp.* 22 millim.

1040. **Miltochrista gratiosa**, insert (syn.) :—

Miltochrista germana, Roths. Nov. Zool. xx. p. 214 (1913).

Assam, Khásis, type † ♂ in Coll. Rothschild, the form *epixantha*.

1049 *a*. **Miltochrista syntypica.** (Plate XLI. fig. 3.)

Barsine syntypica, Swinh. A. M. N. H. (7) xvii. p. 540 (1906).

Head and thorax yellowish white; patagia with black spots at base; metathorax with paired black spots; abdomen white. Fore wing yellowish white; a black spot in base of cell; two antemedial lines formed of bars from costa, cell and above inner margin, angled at middle, then oblique; a slightly sinuous medial line interrupted in cell and at vein 1; a small black discoidal spot; postmedial line formed by a series of small black spots on the veins with streaks from them to termen, forking on veins 7, 8, 9, the series incurved below costa, excurved to vein 4, then incurved. Hind wing white, the veins of terminal area slightly streaked with black.

Hab. Selangor, Pahang (*Holman-Hunt*), 2 ♂; W. Sumatra, Padang, 1 ♀ type. *Exp.* 26 millim.

*1054 *a*. **Miltochrista vepallida.** (Plate XLI. fig. 4.)

Miltochrista vepallida, Holl. Nov. Zool. vii. p. 562 (1900).

♂. Head and thorax pale orange-yellow; abdomen pale yellow. Fore wing pale orange-yellow; a black point in the cell near base; traces of a waved reddish brown antemedial line from cell to inner margin; a very indistinct reddish brown medial line, formed by hair-like scales, oblique to discal fold near end of cell, then inwardly oblique and sinuous; a very indistinct slightly waved reddish brown postmedial line formed by hair-like scales, excurved to vein 4, then incurved; a sinuous subterminal series of slight reddish brown spots formed by hair-like scales in the interspaces. Hind wing pale yellow.

Hab. Buru (*Doherty*), type † ♂ in Coll. Holland. *Exp.* 24 millim.

*1054 *b*. **Miltochrista thomensis.** (Plate XLI. fig. 5.)

Asura thomensis, Roths. Nov. Zool. xx. p. 211 (1913).

♀. Head, thorax, and abdomen pale yellow; fore tibiæ and tarsi

blackish at extremities. Fore wing pale yellow with a very faint pinkish tinge on the brown markings; a diffused obliquely curved pale reddish brown antemedial band, and a similar erect medial band; a slight brownish discoidal striga; a pale reddish brown postmedial band, excurved below costa and ending at vein 1; slight subterminal brownish spots at veins 6 and 4. Hind wing pale semihyaline yellow.

Hab. W. Africa, St. Thomé I. (*Macquerys*), type † ♀ in Coll. Rothschild. *Exp.* 20 millim.

1055 *a*. **Miltochrista limbata.** (Plate XLI. fig. 6.)

Asura limbata, Wileman, Entom. xliv. p. 110 (1911).

Head and thorax white, the tegulæ, patagia, pro- and metathorax with red-brown patches; palpi and upper part of frons tinged with red-brown; fore femora and tibiæ red-brown on inner side, the extremities of tarsi brown; abdomen white dorsally tinged with brown. Fore wing red-brown with white terminal band; a slight white subbasal line from costa to vein 1; a white streak on inner margin from base to the white antemedial line, which is excurved below costa, then oblique, joined at inner margin by an oblique white line from submedian fold; a white spot at middle of costa; the terminal white band with red-brown spots below costa and vein 7 and at middle. Hind wing whitish suffused with red-brown, the base and a diffused oblique medial line whiter; white spots on termen at discal fold and between veins 3 and 2; cilia white. Underside of fore wing with the subterminal spots conjoined to the brown area; hind wing white with diffused brown ante- and postmedial bands, two conjoined subterminal spots below apex and one below vein 4.

Hab. Formosa, Kanshirei (*Wileman*), 2 ♀. *Exp.* ♂ 20, ♀ 24 millim. Type † ♂, ♀ in Coll. Wileman.

*1055 *b*. **Miltochrista pica.** (Plate XLI. fig. 7.)

Asura pica, Wileman, Entom. xliv. p. 111 (1911).

♀. Head white mixed with brown; thorax dark brown with some white mixed; pectus and legs white, the fore tibiæ brown; abdomen dark brown, the ventral surface white. Fore wing dark brown with white terminal band; a white subbasal line; a white streak on inner margin from base to the antemedial white line, which is excurved below costa, then oblique, joined at inner margin by an oblique white line from submedian fold; a white spot on middle of costa; the terminal white band with brown spots below costa and vein 7 and at middle; cilia brown. Hind wing brown with slight white spot on termen at vein 2; cilia dark brown at base, whitish at tips. Underside of fore wing brown with terminal white spot at vein 4 and double spot in submedian interspace;

hind wing with the termen whitish with dark spots below apex and vein 4.

Hab. Formosa, Kanshirei (*Wileman*), type † ♀ in Coll. Wileman. *Exp.* 18 millim. This may be a dark form of *M. limbata*.

1061. **Miltochrista perpallida**, insert (syn.) :—

Diacrisia porthesioides, Roths. Nov. Zool. xvii. p. 186 (1910); & xviii. pl. vi. f. 26.

Sikhim (*Pilcher*), type † ♂ in Coll. Rothschild.

*1063 *a*. **Eutane aglæa**, n. sp.

Hind wing with veins 3, 4 coincident.

♀. Head and thorax whitish glossed with golden yellow and mixed with some cupreous red-brown; palpi brown; pectus and legs pale yellow, the fore tibiæ and tarsi suffused with brown. Fore wing whitish glossed with golden yellow and with some cupreous red-brown mixed; an indistinct cupreous red-brown antemedial line, oblique and sinuous below discal fold, a spot beyond it in submedian interspace; a cupreous red-brown medial line diffused on outer side, oblique to discal fold, then inwardly oblique and

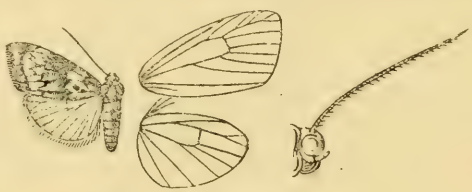

Fig. 256.—*Eutane aglæa*, ♀. ⅔.

sinuous; a diffused cupreous red-brown spot at lower angle of cell; an indistinct dentate cupreous red-brown postmedial line, oblique to vein 6, then inwardly oblique and with a point on it at discal fold; a cupreous red-brown subterminal shade, with slight oblique streaks beyond it on the veins towards apex; cilia with series of red-brown spots at base. Hind wing yellowish white. Underside of fore wing yellowish white tinged with brown and with indistinct curved brown postmedial line.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 18 millim.

*1063 *b*. **Eutane subnigra.** (Plate XLI. fig. 8.)

Hectobrocha subnigra, Lucas, P. Linn. Soc. N.S.W. (2) iv. p. 1072 (1890).

♀. Head, thorax, and abdomen ochreous grey; palpi black; patagia black at base. Fore wing ochreous grey; a black point at base followed by a black bar and an oblique fuscous brown shade

from costa; antemedial line fuscous brown, waved, bent inwards and diffused to costa; a black point at middle of cell and small discoidal spot; a diffused waved fuscous brown medial shade, angled outwards in cell, then oblique; postmedial area suffused with fuscous brown, its inner edge formed by the obscure dentate postmedial line, its outer by the subterminal line, angled inwards below costa, excurved at veins 6 and 4 and bent outwards to tornus; a diffused waved fuscous brown line just before termen. Hind wing grey suffused with fuscous brown especially on terminal area; the underside ochreous grey, an indistinct diffused fuscous antemedial line and discoidal point.

Hab. Queensland, Brisbane, type † ♀ in Coll. Lucas. *Exp.* 38 millim.

1064 *a*. **Eutane nivea.** (Plate XLI. fig. 9.)

Eutane nivea, Hmpsn. A. M. N. H. (7) xv. p. 439 (1905).

♀. Frons orange; vertex of head and thorax pure white; legs tinged with fulvous; abdomen white tinged with yellow towards extremity. Fore wing pure white; the costa narrowly orange; a black point on discocellulars; the termen and cilia orange with a series of black striæ before the former expanding into a spot at vein 2 and a series of black and silver striæ at base of latter. Hind wing white, the cilia tinged with yellow. Underside of fore wing with the costal area tinged with yellow, the disk with fuscous.

Hab. Pulo Laut (*Doherty*), 1 ♀ type. *Exp.* 20 millim.

*1075 *a*. **Thallarcha fuscogrisea.** (Plate XLI. fig. 10.)

Thallarcha fuscogrisea, Roths. Nov. Zool. xx. p. 217 (1913).

♂. Head white, the palpi and frons suffused with brown; antennæ brown, the shaft white above towards tips; thorax brown, the tegulæ dorsally and a patch on metathorax white; pectus and legs brown mixed with white; abdomen yellow. Fore wing white; the basal half of costal area broadly suffused with red-brown; a subbasal black point in the cell; a diffused inwardly oblique medial red-brown line, incurved in cell and at submedian fold, a small black spot beyond it in the cell; a red-brown discoidal bar; a diffused red-brown band just beyond the cell, expanding into a patch on costal area and incurved below end of cell, a spot beyond it on inner area; the terminal area irrorated with red-brown and with four subterminal spots between veins 7 and 3. Hind wing orange-yellow with apical red-brown patch and terminal line to submedian fold; cilia white mixed with brown, yellow towards tornus. Underside of fore wing suffused with red-brown, an apical patch and the termen white.

Hab. S. Australia, Parkside, type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

Genus **EURYNORA**, nov.

Type, *E. flaveola*.

Proboscis fully developed; palpi upturned, the 3rd joint rather long and reaching to vertex of head; antennæ of male ciliated; tibiæ with the spurs moderate. Fore wing with the costa highly arched towards base, the apex rounded, the termen evenly curved, the inner margin highly arched in male, which has a slight fold from base to termen through the cell; vein 2 from middle of cell, curved at base; 3, 4 shortly stalked; 5 from just above angle; 6 from upper angle; 7, 8 stalked; 9, 10 stalked; 11 from cell, free. Hind wing with the costa highly arched in male, the termen and inner margin towards tornus slightly curled over above; vein 2 from towards angle of cell; 3 and 5 stalked, 4 absent; the upper discocellular very oblique, especially in male; 6, 7 separate at origin; 8 from middle of cell.

In key differs from *Paragylla* in the fore wing having veins 3, 4 stalked; hind wing with vein 4 absent.

*1084 *a*. Eurynora flaveola.

Bitecta flaveola, Roths. Nov. Zool. xix. p. 223 (1912).

Head and thorax orange-yellow; antennæ brownish; fore and mid tibiæ and tarsi fuscous; abdomen pale yellow, the ventral surface orange-yellow. Fore wing orange-yellow, the costa fuscous towards base. Hind wing pale yellow. Underside of fore wing pale yellow, the costal area and cilia orange-yellow.

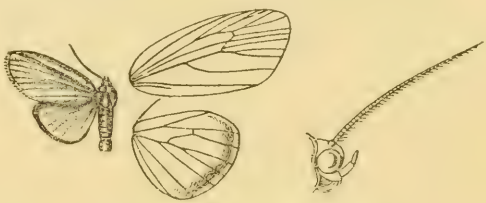

Fig. 257.—*Eurynora flaveola*, ♂. ½.

Ab. 1. Head, thorax, and fore wing much paler yellow, the last with the costa not fuscous towards base.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* 26 millim.

Genus **EUROZONOSIA**, nov.

Type, *E. fulvinigra*.

Proboscis fully developed; palpi minute, porrect, clothed with rough hair; frons smooth; antennæ of male serrate and ciliated; hind tibiæ with two pairs of spurs. Fore wing short and broad, the apex rounded, the termen evenly curved; vein 3 from long before angle of cell; 5 from above angle; 6 from below upper angle; 7, 8 stalked; 9 absent (? coincident with 10); 10, 11 from cell. Hind wing with vein 3 from long before angle of cell; 5 from well above angle; 6, 7 stalked; 8 from towards angle of cell.

In key differs from *Eutelesia* in the palpi being porrect, minute, and clothed with rough hair.

1084 *b*. **Eurozonosia fulvinigra**, n. sp.

♂. Head and thorax black-brown; tegulæ orange, fore femora and tibiæ on outer side and hind tibiæ towards base fuscous; abdomen orange. Fore wing orange, rather thinly scaled; the costal edge black; the terminal area black-brown extending to end of cell. Hind wing orange, rather thinly scaled, the terminal area black-brown, broadly at costa, narrowing to tornus.

Fig. 258.—*Eurozonosia fulvinigra*, ♂. ½.

In one specimen vein 10 of the fore wing is stalked with 7, 8 on left side only.

Hab. Br. E. Africa, N. Kavirondo, Mumias (*Neave*), 1 ♂ type, S. Kavirondo, Kuja Valley (*Neave*), 1 ♂; Uganda, Unyoro, Kafu R. (*Neave*), 1 ♂, Toro, Daro Forest (*Neave*), 1 ♂, Lake Albert (*Neave*), 1 ♂. *Exp.* 18–22 millim.

1085 *a*. **Philenora tenuilinea**, n. sp. (Plate XLI. fig. 11.)

♀. Head and thorax pale ochreous yellow; abdomen white tinged with ochreous at base. Fore wing pale ochreous yellow; traces of a brownish antemedial line, oblique from costa to submedian fold where it is angled outwards, then inwardly oblique; an inwardly oblique pale brown postmedial line, slightly curved inwards to costa and incurved at vein 5. Hind wing semihyaline white.

Hab. Formosa, Kanshirei (*Wileman*), 1 ♀ type. *Exp.* 18 millim.

1088 *a*. **Philenora lauta**. (Plate XLI. fig. 12.)

Nola lauta, Swinh. A. M. N. H. (7) xi. p. 502 (1903).

♀. Head and thorax grey-white; abdomen brownish grey. Fore wing grey with a slight ochreous tinge and sparsely irrorated with fuscous: the costal edge black towards base; an antemedial blackish line angled outwards on subcostal nervure and ending at vein 1; black points in middle and end of cell; a curved postmedial line with some fuscous suffusion beyond it; a subterminal series of short diffused streaks, incurved below vein 3, angled outwards on

vein 1; a terminal series of short striæ. Hind wing grey with an ochreous tinge; a very indistinct diffused postmedial line.

Hab. Siam, Muok-Lek (*Frühstorfer*), 1 ♀ type. *Exp.* 18 millim.

*1088 *b*. **Philenora mediopuncta.** (Plate XLI. fig. 13.)

Eugoa mediopuncta, Roths. Nov. Zool. xx. p. 221 (1913).

♂. Head and thorax white, the antennæ brownish, the base of head with some brown scales, a dark brown band across patagia and mesothorax; palpi dark brown at sides; pectus and legs tinged with yellow, the fore femora dark brown below; abdomen yellowish white. Fore wing creamy white slightly irrorated with brown; a nearly straight erect dark red-brown antemedial line; a small round black-brown spot in end of cell; postmedial line dark red-brown, expanding into a small spot on outer side at costa, somewhat oblique to vein 6, then erect, a patch of dark red-brown suffusion on its outer side from below costa to vein 2 connected with an oblique diffused dark red-brown bar from apex and incurved band from vein 4 to tornus; a dark brown terminal line slightly interrupted at the veins. Hind wing pale yellow; traces of a diffused red-brown postmedial band from costa to vein 2; a fine dark brown terminal line from apex to submedian fold. Underside of fore wing suffused with brown, black-brown spots on costa before and beyond middle and at apex, and a minute dark streak on median nervure towards end of cell; hind wing with the costal area tinged with brown.

Hab. Solomon Is., Isabel I. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

*1088 *c*. **Philenora sordidior.** (Plate XLI. fig. 14.)

Eugoa mediopuncta, sordidior, Roths. Nov. Zool. xx. p. 222 (1913).

♀. Head, tegulæ, and prothorax yellowish white, the rest of thorax suffused with brown; antennæ tinged with brown; palpi dark brown at sides; fore femora dark brown on inner side; abdomen pale yellow tinged with red-brown. Fore wing yellowish white slightly irrorated with reddish brown; some dark reddish brown at base and the costal edge black-brown towards base; an oblique dark reddish brown antemedial line; a small round black-brown spot in middle of cell and discoidal spot, the latter connected with the dark reddish brown postmedial line with a patch of red-brown suffusion beyond it from below costa to vein 2 joined by an oblique diffused bar from apex and connected with an incurved band from vein 4 to tornus; some red-brown on termen towards apex and the cilia red-brown. Hind wing pale yellow; a faint reddish brown postmedial band from costa to vein 2 and some red-brown suffusion

on termen towards apex. Underside of fore wing suffused with brown, a yellowish white mark on costa beyond the postmedial line; hind wing with the costal area tinged with reddish brown.

Hab. Br. N. Guinea, Kumusi R. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 20 millim.

1090 *a*. **Philenora disticha**, n. sp. (Plate XLI. fig. 15.)

♀. Head and thorax grey tinged with brown; abdomen greyish brown, the anal tuft greyer. Fore wing grey tinged with brown, the terminal area striated with brown; a slight black mark at base of costa; traces of an oblique antemedial line; small black spots in middle of cell and on discocellulars; postmedial line brown, oblique to vein 6, then inwardly oblique; a slight punctiform blackish terminal line with minute greyish lunules before it on apical half. Hind wing grey-brown; the underside browner with blackish discoidal spot.

Hab. Gold Coast, Bibianaha (*Spurrell*), 1 ♀ type. *Exp.* 14 millim.

*1092 *a*. **Philenora pluripunctata.**

Eugoa pluripunctata, Mab. Ann. Soc. Ent. Fr. 1899, p. 725.

♀. Pale grey-brown. Fore wing with a slight rufous tinge on submedian area, the inner margin paler; an antemedial black point above inner margin; a point in middle of cell and a point at lower angle; faint traces of a postmedial punctiform line angled at vein 5, then very oblique and ending in a prominent point on inner margin. Hind wing paler grey-brown with fuscous discoidal point.

Hab. Madagascar, Baie d'Antongil (*Macquerys*), type † ♀ in Mus. Paris. *Exp.* 22 millim.

1093 *a*. **Philenora subfusca.**

Philenora subfusca, Fryer, Trans. Linn. Soc., Zool. xv. p. 5, pl. i. fig. 4 (1912).

♂. Head and thorax dark reddish brown; abdomen fuscous brown, the ventral surface reddish brown. Fore wing reddish brown tinged with fuscous; an indistinct diffused dark antemedial line, oblique to median nervure, then inwardly oblique and angled inwards on vein 1; a minute blackish streak in the cell towards extremity and discoidal point; a diffused oblique dark line from lower angle of cell to inner margin; traces of a subterminal shade. Hind wing and underside uniform red-brown.

Hab. Seychelles, Silhouette (*Fryer*), 1 ♂ type. *Exp.* 18 millim.

*1097 *a*. Philenora aroa. (Plate XLI. fig. 16.)

Schistophleps aroa, Beth.-Baker, Nov. Zool. xi. p. 426 (1904).

♂. Head, thorax, and abdomen white faintly tinged with ochreous and fuscous; palpi blackish at sides. Fore wing creamy white; the costal edge black towards base; the antemedial line represented by a fuscous bar from costa to middle of cell, a spot nearer base just below median nervure and a spot above vein 1; a small spot in middle of cell and a slight discoidal lunule; postmedial line represented by a fuscous patch from costa to vein 7, then produced to slight streaks on the veins, excurved to vein 4, then sinuous; subterminal line represented by a diffused oblique fuscous patch from apex, then narrower, interrupted at discal fold and incurved below vein 4; a series of dark striæ on termen with brown spots beyond them on the cilia. Hind wing creamy white; the underside with slight brown postmedial and subterminal bars from costa to vein 6.

Hab. Br. N. Guinea, Up. Aroa R. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 22 millim.

1100. Philenora unicolor, insert:—

Megacraspedum quinque-punctatum, Mab. Ann. Soc. Ent. Fr. 1899, p. 727.

Fore wing with the spots larger, the one at end of cell with spot on costa above it; an apical black patch extending to below vein 3 and enclosing an orange spot between veins 7 and 4. Hind wing with prominent black discoidal spot, the cilia black.

Philenora malagassa, Strand, Arch. Naturg. lxxxviii. (7) p. 193 (1912).

Philenora nyassa, Strand, Arch. Naturg. lxxxviii. (7) p. 193 (1912), for ab. 4.

1103 *a*. Palpidia melanotricha.

Palpidia melanotricha, Hmpsn. A. M. N. H. (7) xix. p. 234 (1907).

Palpi hardly reaching above vertex of head, the 2nd joint moderately scaled in front; antennæ of male ciliated; fore wing with vein 10 stalked with 7, 8, 9; hind wing with veins 6, 7 stalked.

♂. Head, thorax, and abdomen white mixed with ochreous; palpi with fuscous patch on 2nd joint at sides; tarsi slightly banded with fuscous. Fore wing white finely striated with golden brown and irrorated with long black hair-like scales on basal, medial, and postmedial areas; antemedial line dark brown, from costa to submedian fold, straight; postmedial line red-brown, oblique from costa to discal fold, then slightly incurved; an ill-defined waved white subterminal line, excurved below costa and at middle, angled

inwards at discal and submedian folds; a fine black terminal line; cilia white, the tips tinged with brown. Hind wing white, the veins, inner and terminal areas tinged with brown; a fine black

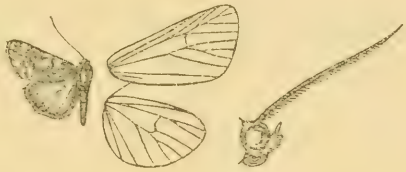

Fig. 259.—*Palpidia melanotricha*, ♂. ½.

terminal line; the underside with the costal area irrorated with brown, a black discoidal striga and interrupted maculate fuscous postmedial and subterminal lines.

Hab. Jamaica, Runaway Bay (*Walsingham*), 2 ♂ type. *Exp.* 16 millim.

1104. **Lerina incarnata**, insert (syn.):—

Clemucha robinsonii, Boisd. Ann. Soc. Ent. Belge, xii. p. 71 (1869); Kirby, Cat. Het. p. 177.

Larva. Dyar, Proc. Ent. Soc. Wash. x. p. 162 (1909).

Cylindrical, yellowish white clothed with foxy-red hair; warts large but low and flat, black and distinct, i to vi normal; iv rather large; the thorax with two warts above the stigmatal wart, large, distinct and separate, wart iii small, placed behind wart iv + v; claspers with large black hairy plates and hairy on inner side also; no cervical shield or anal plate; head rounded, pale reddish, the sutures darker. Food-plant, *Asclepias pumila*. The larva has the structure of an Arctian, not Lithosid.

*1106*a*. **Hæmatomis radians.** (Plate XLI. fig. 17.)

Hæmatomis radians, Dyar, J. N.Y. Ent. Soc. xv. p. 227 (1907).

♂. Head yellowish white, the frons at sides and antennæ brown; thorax brown, the shoulders with whitish patches tinged with crimson; pectus tinged with crimson, the legs brown and whitish; abdomen pale reddish brown. Fore wing pale reddish brown; the costa with narrow yellowish white streak; narrow yellowish white streaks in discal and submedian folds from base to termen where they expand slightly; the inner margin with narrow yellowish white streak; cilia yellowish white. Hind wing whitish suffused with brown and with ill-defined whitish streak in discal fold from base to termen; cilia whitish.

Hab. Mexico, Orizaba, type † ♂ in U.S. Nat. Mus. *Exp.* 20 millim.

1108. Hypoprepia miniata.

Larva. Dyar, Pr. U.S. Nat. Mus. xxvii. p. 793 (1904).

1110. Hypoprepia cadaverosa, insert:—

Hypoprepia dollii, Dyar, Bull. Inst. Mus. Brooklyn, i. p. 194 (1906).

A small form, the size of *H. fucosa*.
U.S.A., Texas, Brownsville.

1112 *a*. Diarhabdosia strigipennis. (Plate XLI. fig. 18.)

Diarhabdosia strigipennis, Schaus, Pr. U.S. Nat. Mus. xxix. p. 205 (1905).

♂. Head and thorax white; antennæ ringed with black except at base; tibiæ and tarsi at extremities banded with black; abdomen yellow, tinged with crimson at extremity. Fore wing white; a subbasal black striga on costa; a semicircular black annulus on middle of costa conjoined to an oblique reniform, black-outlined, discoidal mark, concave towards base; an antemedial point on vein 1; an irregularly conical black-outlined mark from costa before apex to vein 5, the veins on it streaked with black, its lower extremity connected with a diffused blackish patch on termen; a hook-shaped mark from vein 3 to above tornus, with some dark irroration near it. Hind wing bright yellow with small apical fuscous patch.

Hab. Fr. Guiana, Cayenne (*Schaus*), 1 ♂, St. Jean Maroni, type † ♂ in U.S. Nat. Mus. *Exp.* 16 millim.

*1113 *a*. Diarhabdosia cora. (Plate XLI. fig. 19.)

Diarhabdosia cora, Dyar, J. N.Y. Ent. Soc. xv. p. 227 (1907).

♂. Head and tegulæ yellowish white, the latter with some crimson hair behind them; antennæ brown; thorax reddish brown mixed with yellowish white; pectus and legs pale yellow, the fore legs brown in front; abdomen pale yellow faintly tinged with crimson dorsally. Fore wing pale red-brown with a greyish tinge; a yellowish white fascia on costa narrowing to a point before apex; a narrow yellowish white streak in discal fold from base to termen; the inner area yellowish white except at base, expanding obliquely to vein 4 on terminal area; cilia yellowish white. Hind wing pale orange-yellow with small brown patch on apical area.

Hab. Fr. Guiana, St. Jean Maroni (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 16 millim.

1113 *b*. Diarhabdosia coroides. (Plate XLI. fig. 20.)

Diarhabdosia coroides, Schaus, A. M. N. H. (8) vii. p. 368 (1911).

♂. Head and thorax pale yellow, the upper part of frons and

antennæ blackish, the tips of tegulæ, base of patagia, and dorsum of thorax flesh pink, the metathorax with fuscous patch; fore legs blackish, the tibiæ and tarsi ringed with white; abdomen ochreous yellow. Fore wing pale reddish brown; a pale yellow fascia on costa, a streak from base through the cell to termen, and a fascia on inner margin continued as a band on termen to vein 5; cilia pale yellow. Hind wing ochreous yellow suffused with brown except on inner area; cilia whitish, tinged with brown at apex. Underside of fore wing with the brown areas darker; hind wing ochreous yellow, the termen suffused with brown from apex to submedian fold, more broadly towards costa.

♀. Hind wing wholly brown, the cilia whitish; the underside with the costa whitish to near apex.

Hab. Costa Rica, Tuis (*Schaus*), 1 ♂; Panama, La Chorrera (*Dolby-Tyler*), 1 ♀. *Exp.* ♂ 18, ♀ 20 millim.

*1113 *c*. **Diarhabdosia melinda.** (Plate XLI. fig. 21.)

Diarhabdosia melinda, Schaus, A. M. N. H. (8) vii. p. 369 (1911).

♂. Head and thorax yellowish white, the patagia and prothorax tinged with pink; antennæ and a band between their bases brown; fore and mid tibiæ and tarsi banded with brown; abdomen yellowish white dorsally tinged with brown at extremity. Fore wing yellowish white, the costal edge blackish at base; a diffused pale rufous fascia in discal fold from middle of cell, bent up to costa just before apex and with some pale rufous suffusion above it at middle of costal area; some pale rufous suffusion above base of inner margin and a diffused fascia below the cell and vein 5 from before middle of wing to termen. Hind wing yellowish white with a pale brown terminal band from apex to vein 3, where it is obliquely bent inwards to below end of cell. Underside of fore wing with the two fasciæ brown; hind wing white with small brown patch on termen just below apex.

Hab. Costa Rica, Banana R. (*Schaus*), type † ♂ in U.S. Nat. Mus. *Exp.* 20 millim.

*1113 *d*. **Diarhabdosia mandana.** (Plate XLI. fig. 22.)

Diarhabdosia mandana, Dyar, J. N.Y. Ent. Soc. xv. p. 228 (1907).

♂. Head and thorax pale reddish brown, the tegulæ more fulvous; legs yellowish, the extremities of the tibiæ and tarsi brown; abdomen brownish with some yellowish hair at base and extremity, the ventral surface pale yellow. Fore wing pale reddish brown with yellowish white fascia on costa from before middle to near apex; a narrow yellowish white streak in discal fold from base to termen; the inner area yellowish white except towards base and tornus; the terminal area yellowish white towards tornus; cilia yellowish white. Hind wing yellowish white with small apical red-brown patch.

Hab. Brazil, Castro Paraña (*D. Jones*), type † ♂ in U.S. Nat. Mus. *Exp.* 24 millim.

Genus **RHABDATOMIS**.

Type.

Rhabdatomis, Dyar, J. N.Y. Ent. Soc. xv. p. 227 (1907) ..... *zaba*.

Proboscis fully developed; palpi slender, porrect, extending as far as frons, which is smooth and rounded; antennæ of male with bristles and cilia, tibiæ with the spurs rather short. Fore wing narrow, the costa arched, the termen obliquely curved; the discal fold strong; the cell long; vein 2 from well before angle of cell, slightly curved towards base; 3 near angle; 5 from above angle; 6 from below upper angle; 7, 8, 9 stalked, 7 from beyond 9; 10, 11 from cell, 11 curved and approximated to 12. Hind wing with the cell long; vein 2 from well before angle; 3, 4 strongly stalked; 5 present; 6, 7 stalked; 8 from middle of cell.

In key differs from *Eurosia* in the fore wing having vein 2 from beyond middle of cell and vein 11 curved and approximated to 12.

*1113*e*. Rhabdatomis zaba.

Rhabdatomis zaba, Dyar, J. N.Y. Ent. Soc. xv. p. 227 (1907).

♂. Head yellow above, the palpi, frons, and antennæ greyish; thorax yellow tinged with pink; abdomen yellowish. Fore wing grey, the costa, a fascia from base of median nervure to termen below apex, and the inner margin broadly yellowish; cilia yellowish. Hind wing whitish, the inner area tinged with yellow, the costa and terminal area to vein 2 suffused with grey.

Fig. 260.—*Rhabdatomis zaba*, ♂. ½.

Hab. Mexico, Orizaba (*Schaus*). *Exp.* 24 millim. This species is unknown to me, figured from a drawing from type in U.S. Nat. Mus.

*1114*a*. Eurylomia similliforma. (Plate XLI. fig. 23.)

Eurylomia similliforma, Roths. Nov. Zool. xx. p. 217 (1913).

♂. Head, thorax, and abdomen orange-yellow; antennæ black; tibiæ and tarsi black-brown; abdomen with some fuscous at base, a black-brown lateral stripe, the anal tuft black-brown and the claspers fuscous above. Fore wing orange-yellow, the costal edge black-brown; a terminal black-brown band tinged with grey, expanding at apex and running inwards on inner margin to middle. Hind wing pale orange-yellow; some reddish brown suffusion in and just beyond upper part of cell; the termen narrowly and cilia

black-brown tinged with grey; the underside with the costal edge brown.

♀. Fore wing with the black-brown on termen expanding into patches at apex and tornus; hind wing with the costal area suffused with black-brown and expanding into a patch at apex.

Hab. "Guatil" (? Cuba), type † ♂, ♀ in Coll. Rothschild. *Exp.* 48 millim.

Genus **PHLOGOMERA**, nov.

Type, *P. bicolor*.

Proboscis fully developed; palpi porrect, extending to just beyond the frons; antennæ of male bipectinate with rather long branches, the apex ciliated; tibiæ with the spurs long. Fore wing short and broad, the apex rounded, the termen evenly curved; vein 2 from middle of cell, oblique; 3 from before angle; 5 absent; 6 from below upper angle; 7, 8 stalked; 9, 10 stalked; 11 from cell, oblique. Hind wing with vein 2 from middle of cell; 3, 4 coincident; 5 absent; 6, 7 strongly stalked; 8 from middle of cell.

In key differs from *Melastrota* in the fore wing having vein 11 free and no veinlets between vein 12 and the costa.

*1119 *a*. Phlogomera bicolor.

Asura bicolor, Roths. Nov. Zool. xx. p. 210 (1913).

Head, thorax, and abdomen black-brown, the tarsi whitish at base, the ventral surface of abdomen with whitish streak. Fore wing black-brown with large rounded deep orange patch from below costa

Fig. 261.—*Phlogomera bicolor*, ♂. ½.

beyond middle to inner margin, extending into end of cell. Hind wing dark brown with large rounded deep orange patch from costa beyond middle to vein 2.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♂ in Coll. Rothschild; Setekwa R., Snow Mts. (*Meek*). *Exp.* 22 millim.

1132. Schistophleps albida, insert (syn.):—

Caulocera fasciolata, punctistriata, Roths. Nov. Zool. xx. p. 219, ♀ (nec ♂).

Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*) in Coll. Rothschild.

*1132 *a*. Schistophleps costimacula. (Plate XLI. fig. 24.)

Schistophleps costimacula, Roths. Nov. Zool. xx. p. 218 (1913).

Head, thorax, and abdomen white, the antennæ tinged with brown. Fore wing white, thinly scaled; the costal edge brown towards base; an oblique wedge-shaped antemedial brown patch from costa, a medial patch with sinuous edges on costa and slight obliquely curved mark at inner margin; a spot on costa towards apex. Hind wing white, thinly scaled.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂, ♀ in Coll. Rothschild; Angabunga R. (*Meek*). *Exp.* ♂ 20, ♀ 24 millim.

*1132 *b*. Schistophleps noloides. (Plate XLI. fig. 25.)

Schistophleps noloides, Roths. Nov. Zool. xx. p. 218 (1913).

Head and thorax white mixed with some rufous; abdomen white, dorsally tinged with rufous towards extremity. Fore wing semihyaline white; some dark brown at base of costa; a dark brown antemedial patch on costa with diffused oblique rufous shade from it to submedian fold; a small dark red-brown spot in cell towards extremity; a rather quadrate dark red-brown patch on costa above end of cell with a rufous line from it to inner margin with darker points on the discocellulars and veins, excurved at end of cell, then oblique, the area beyond it suffused with rufous, with a white patch on costa with white line arising from it, excurved to vein 6, then rather oblique, followed by a slight dark patch on costa before apex. Hind wing semihyaline white, the apical area tinged with rufous in male.

Hab. Br. N. Guinea, Kumusi R. (*Meek*), type † ♂ in Coll. Rothschild; Mambare R., Biagi (*Meek*). *Exp.* 22 millim.

1132 *c*. Schistophleps bicolora.

Schistophleps bicolora, Beth.-Baker, Nov. Zool. xi. p. 426, pl. v. fig. 40 (1904).

Head, thorax, and abdomen dirty white; palpi brown at sides. Fore wing rather dirty white; a brown mark on costa at base, almost conjoined to an oblique ill-defined brown band from costa to submedian fold where it nearly joins a curved brown mark on inner margin; a slight brown point in middle of cell and others on subcostal and median nervures near end of cell, the upper conjoined to a somewhat quadrate brown patch on costa; postmedial line very ill-defined, rather dentate, oblique from a brown spot on costa before apex to the brown patch on inner margin, but interrupted below costa; some ill-defined lunulate brown marks before middle of termen; a terminal series of short streak-like marks. Hind

wing white, the apical part of terminal area tinged with brown especially in female; a slight discoidal point.

Hab. Br. N. Guinea, Aroa River (*Meek*), 1 ♂, 1 ♀. *Exp.* 24 millim.

*1133 *a*. **Schistophleps simillima.** (Plate XLI. fig. 26.)

Nudaria simillima, Roths. Nov. Zool. xx. p. 220 (1913).

♀. Head, thorax, and abdomen chalky white; fore tibiæ tinged with brown towards extremity. Fore wing semihyaline white with a faint brownish tinge; minute blackish points in middle of cell and on discocellulars; a medial series of slight brownish points on the veins; traces of a dentate brownish postmedial line with minute darker streaks on the veins, excurved below costa and angled inwards at vein 4; the veins of terminal area with slight brownish streaks. Hind wing hyaline white.

Hab. Br. N. Guinea, Angabunga R. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 26 millim.

*1134 *a*. **Schistophleps hyalina.** (Plate XLI. fig. 27.)

Schistophleps hyalina, Beth.-Baker, Nov. Zool. xv. p. 196 (1908).

♂. Head and thorax yellowish white; fore tibiæ and tarsi brown ringed with whitish; abdomen white. Fore wing semihyaline ochreous white, the costal edge brown towards base. Hind wing hyaline white.

Hab. Br. N. Guinea, Owgarra (*Meek*), type † ♂ in Coll. Bethune-Baker. *Exp.* 22 millim.

*1134 *b*. **Schistophleps chamaitoides.** (Plate XLI. fig. 28.)

Nudaria chamaitoides, Roths. Nov. Zool. xx. p. 220 (1913).

Head, thorax, and abdomen chalky white; fore tibiæ and tarsi pale brown ringed with white. Fore wing semihyaline chalky white; faint traces of sinuous brownish medial, postmedial, and subterminal lines and of points in middle of cell and on discocellulars. Hind wing semihyaline white.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* 24 millim.

Genus **TEINOMASTYX**, nov.

Type, *T. griseobasis*.

Proboscis fully developed; palpi short, porrect, clothed with rough hair; frons smooth; antennæ with long cilia, the basal joint very long and clothed with long hairs; head and thorax clothed with rough hairs; fore tibiæ of male with fringe of very long hair on outer side, the tarsal joints much shortened, mid and hind tibiæ with the spurs short. Fore wing sparsely clothed with hair-like scales, the costa highly arched towards base, the apex rounded, the termen evenly

curved; vein 2 from middle of cell; 3 from long before angle; the discocellulars excurved; 5 from well above angle; 6 from well below upper angle; 7 and 9 stalked, 8 absent; 10, 11 stalked, 11 anastomosing with 12 which has six veinlets between it and costa; in female 6 stalked with 7 and 9 and 10, 11 from cell. Hind wing with vein 2 from middle of cell; 3 from long before angle; 5 from well above angle; 6, 7 from upper angle; the costa lobed at base and clothed with long hair above; vein 8 from before middle of cell to the costal lobe; in female veins 6, 7 typically stalked and the costal area normal.

In key differs from *Caulocera* in the antennæ having the basal joint very long; fore wing with veinlets between vein 12 and costa, 6 from cell in male.

*1134 *c*. Teinomastyx griseobasis.

Chamaita griseobasis, Roths. Nov. Zool. xx. p. 219 (1913).

Head and thorax white tinged with rufous; abdomen white dorsally tinged with brown. Fore wing semihyaline white slightly tinged with rufous; an indistinct curved and slightly waved brownish subbasal line from costa to inner margin with the similar

Fig. 262.—*Teinomastyx griseobasis*, ♂. ½.

antemedial line just beyond it; a black point in middle of cell; faint traces of a postmedial line excurved below costa and crossing the end of cell, and of a sinuous subterminal line. Hind wing semihyaline white faintly tinged with rufous.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* ♂ 20, ♀ 24 millim.

*1134 *d*. Teinomastyx goliathina. (Plate XLI. fig. 29.)

Eriomastyx goliathina, Roths. Nov. Zool. xx. p. 218 (1913).

♀. Head, thorax, and abdomen white tinged with rufous. Fore wing semihyaline white faintly tinged with rufous; slight dark subbasal marks on costa and in cell; a slightly curved antemedial brownish line; a black point in middle of cell; a faint diffused medial line, oblique and sinuous to lower angle of cell, then inwardly oblique; traces of a sinuous subterminal line. Hind wing semihyaline white faintly tinged with rufous.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 24 millim.

Genus **SCHALODETA**, nov.

Type, *S. fasciolata*.

Proboscis fully developed; palpi upturned, short, and slender; antennæ of male with tuft of hair on basal joint, serrate; tibiæ with the spurs short. Fore wing rather narrow, the apex rounded; vein 2 strongly bent downwards at base; 3 and 5 from near angle of cell; 6, 7, 8 stalked; 9, 10 stalked; 11 from cell. Hind wing with vein 3 from before angle of cell; 5 from above angle; 6, 7 strongly stalked; 8 from middle of cell.

In key differs from *Holocraspedum* and *Philenora* in the antennæ having a tuft of hair on basal joint; fore wing with vein 6 stalked with 7, 8.

1134 *e*. Schalodeta fasciolata.

Caulocera fasciolata, Roths. Nov. Zool. xx. p. 218 (1913).
Caulocera fasciolata, punctistriata, Roths. Nov. Zool. xx. p. 219 (1913).

Head and thorax white slightly tinged with rufous; pectus, legs, and abdomen creamy white. Fore wing creamy white, rather thinly clothed with hairy scales; some slight rufous marks at base; ill-defined pale rufous subbasal spots on costa and below the cell; antemedial line with a pale rufous spot on costa, then slight,

Fig. 263.—*Schalodeta fasciolata*, ♂. $\frac{1}{1}$.

incurved at subcostal nervure; a rufous patch in submedian interspace before the medial line, which is rufous, oblique towards costa, then less oblique to vein 1 and bent inwards to inner margin, forming small spots in cell and at inner margin; a rufous discoidal spot; postmedial line rufous, rather diffused, oblique, sinuous; a diffused oblique maculate rufous line from costa towards apex to termen at vein 2; a terminal series of rufous striæ from apex to submedian fold with slight white spots before them with some rufous suffusion on their inner side at apex and middle. Hind wing semihyaline white.

Hab. Dutch N. Guinea, Up. Setekwa R., Snow Mts. (*Meek*), 1 ♂, Oetakwa R. (*Meek*), type † ♂ *punctistriata* in Coll. Rothschild; Br. N. Guinea, Kumusi R. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 20 millim.

Genus **CROCODETA**, nov.

Type, *C. variegata.*

Proboscis fully developed; palpi obliquely upturned to beyond the frons, slender; antennæ of female ciliated; tibiæ with the spurs long. Fore wing rather narrow, the apex rounded, the termen evenly curved; vein 2 from beyond middle of cell; 3 from before angle; 5 absent; 6 from below upper angle; 7, 8 and 9, 10 stalked, 11 from cell. Hind wing with vein 2 from towards angle of cell; 3, 4 coincident; 5 absent; 6, 7 on a long stalk; 8 from middle of cell.

In key differs from *Chlorogenia* in the fore wing having vein 9 stalked with 10.

*1134*f.* **Crocodeta variegata.**

Nudaria variegata, Roths. Nov. Zool. xx. p. 220 (1913).

♀. Head, thorax, and abdomen creamy white; antennæ and palpi tinged with yellow; legs tinged with yellow, the fore tibiæ with dark ring at extremities. Fore wing creamy white; a slight fulvous yellow mark at base of costa; a fulvous yellow subbasal bar from costa to median nervure on which it is conjoined by a bar

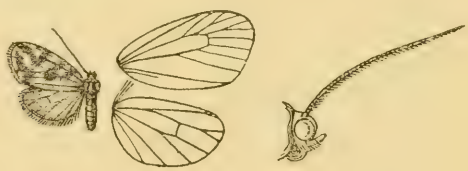

Fig. 264.—*Crocodeta variegata*, ♀. ⅔.

to the rather diffused and somewhat oblique narrow fulvous yellow antemedial band; an oblique fulvous yellow postmedial band; a fulvous yellow subterminal band, oblique from costa near apex to just beyond the postmedial band at vein 7, then excurved, connected with the postmedial band at vein 4 and ending on termen above tornus. Hind wing white tinged with fulvous yellow.

Hab. Br. N. Guinea, Kumusi R. (*Meek*), type† ♀ in Coll. Rothschild. *Exp.* 16 millim.

Genus **ERIOMASTYX**.

	Type.
Eriomastyx, Roths. Nov. Zool. xii. p. 469 (1905).....	*lata.*

Proboscis fully developed; palpi minute, porrect, clothed with long hair; head, thorax, and abdomen clothed with rough hair; antennæ ciliated, the basal joint extremely long and clothed with rough hair; fore tibiæ of male reduced, the tarsi long and thin; mid tibiæ fringed with long hair on outer

side and with fringe of spatulate hair on inner side. Fore wing extremely broad and rounded; vein 3 from long before angle of cell; 5 from well above angle; 6, 7 on a long stalk; 8, 9 on a long stalk, 9 anastomosing with 12 which gives off five veinlets to costa; 10, 11 absent; male with fringe of long hair on vein 1 on underside. Hind wing with vein 3 from well before angle of cell; 5 from well above angle; 6, 7 shortly stalked; 8 anastomosing with the cell to beyond middle.

In key differs from *Hypeugoa* in the antennæ having the basal joint long; fore wing with vein 9 anastomosing with 12 which gives off veinlets to the costa; 10, 11 absent.

*1136 *a*. Eriomastyx lata.

Eriomastyx latus, Roths. Nov. Zool. xii. p. 469 (1905).

♂. Head, thorax, and abdomen pale ochreous tinged with fulvous; mid tibiæ with the fringe of hair on inner side orange fulvous. Fore wing semihyaline pale ochreous tinged with fulvous, the base rather more fulvous; an indistinct slightly sinuous fuscous antemedial line incurved in submedian interspace; a black point in

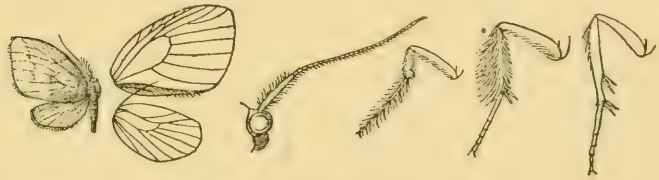

Fig. 265.—*Eriomastyx lata*, ♂. ½.

middle of cell and fuscous discoidal point; an indistinct fuscous medial line, slightly excurved below costa, incurved in cell, then somewhat dentate and oblique; a faint fuscous postmedial line, excurved below costa and dentate at veins 4, 3. Hind wing semihyaline pale ochreous, the costa and basal half of inner margin tinged with fulvous.

Hab. Br. New Guinea, Angabunga R. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 26 millim.

*1137 *a*. Chamaita fascioterminata.

Chamaita fascioterminata, Roths. Nov. Zool. xx. p. 219 (1913).

Fore tibiæ of male dilated with a fold containing a tuft of hair; hind tibiæ fringed on outer side with spatulate scales.

♂. Head, thorax, and abdomen creamy white. Fore wing semihyaline creamy white; a faint rufous subbasal line slightly angled outwards in cell and ending at median nervure; faint rufous antemedial and medial lines excurved below costa and ending at median

nervure; postmedial rufous striæ from costa and inner margin; an indistinct curved rufous subterminal line; slight rufous marks at

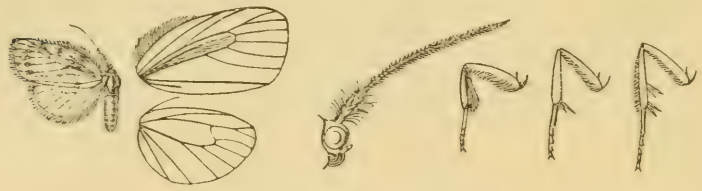

Fig. 266.—*Chamaita fascioterminata*, ♂. $\frac{3}{2}$.

the extremities of the veins. Hind wing semihyaline creamy white.

Hab. Br. N. Guinea, Milne Bay (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

1137 *b*. **Chamaita barnardi**. (Plate XLI. fig. 30.)

Nudaria barnardi, Lucas, P. Linn. Soc. N.S.W. (2) viii. p. 135 (1893).

♂. Head, thorax, and abdomen creamy white. Fore wing creamy white, faint curved subbasal and antemedial brownish lines from costa to inner margin; a fuscous brown streak in cell from the antemedial to the diffused brownish medial line, which is oblique to below the cell, then erect to inner margin; a slight brownish postmedial mark on costa, faint diffused brownish subterminal line, and slight brownish marks at the extremities of the veins. Hind wing semihyaline white.

Hab. Queensland, Kuranda (*Dodd*), 1 ♂, Johnson R., Geralton. *Exp.* 18 millim.

1137 *c*. **Chamaita hirta**.

Chamaita hirta, Wileman, Entom. xliv. p. 110 (1911).

Fore wing of male without fold and tuft of hair.

Fig. 267.—*Chamaita hirta*, ♂. $\frac{1}{1}$.

♂. Head, thorax, and abdomen white, the dorsum of thorax and base of abdomen slightly tinged with rufous. Fore wing semi-

hyaline white, suffused with rufous to just beyond the cell. Hind wing semihyaline white.

♀. Fore wing with the rufous suffusion much less prominent.

Hab. Formosa, Kanshirei (*Wileman*), 2 ♂, 7 ♀ *Exp.* ♂ 16, ♀ 18 millim. Type † ♂, ♀ in Coll. Wileman. *C. metamelæna*, Hmpsn. belongs to this section.

*1138 *a*. **Chamaita niveata.** (Plate XLI. fig. 31.)

Chamaita niveata, Roths. Nov. Zool. xx. p. 219 (1913).

♀. Head, thorax, and abdomen pure white. Fore wing pure semihyaline white with very faint small brownish discoidal spot. Hind wing pure semihyaline white.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 22 millim.

1140 *a*. **Palæopsis squamifera**, n. sp. (Plate XLI. fig. 32.)

Fore wing of male on upperside with a patch of rough androconia in and below middle of cell.

♂. Head, thorax, and abdomen white mixed with pale red-brown. Fore wing white; the patch of rough scales in and below the cell ochreous white; a slight pale red-brown antemedial spot on costa; an oblique pale red-brown band from costa to beyond the cell, then an inwardly oblique sinuous line to inner margin; the terminal area with a V-shaped pale red-brown mark below costa, its apex towards the cell, and a large patch above tornus. Hind wing semihyaline white with a diffused pale brownish mark beyond the cell.

Hab. Formosa (*Wileman*), 1 ♂ type. *Exp.* 16 millim.

1140 *b*. **Palæopsis albipunctella**, n. sp. (Plate XLI. fig. 33.)

♂. Head, thorax, and abdomen white tinged with rufous. Fore wing whitish suffused with rufous; antemedial line double, brownish filled in with whitish, the lines rather widely separated, incurved below submedian fold; postmedial line brownish defined on outer side by white, angled outwards below costa, then somewhat dentate, inwardly oblique to vein 3, then outwardly oblique, joined below the costa by an oblique white streak from costa towards apex; a subterminal series of small white spots from below apex to vein 2; cilia white with a rufous line near base. Hind wing semihyaline white.

Hab. Borneo, Kuching (*Shelford*), 1 ♂ type. *Exp.* 16 millim.

1143. **Nudaria mundana**, insert:—

Var. *alpina*, Uffeln, Ent. Zeit. xxvi. p. 13 (1912).

1148. Nudaria discipuncta.

Larva. Piepers, Tijd. v. Ent. xlvii. p. 164.
Thickly clothed with hair.
Cocoon a circular palisade of hair with the green pupa marked with brown in the centre, its head angulate and extremity pointed.

*1150 *a*. Gymnochroma plagiata.

Gymnochroma plagiata, Roths. Nov. Zool. xx. p. 220 (1913).

Fore wing with vein 9 shortly stalked with 6, 7.
♂. Head, thorax, and abdomen white faintly tinged with rufous; the fore and mid tibiæ and tarsi more rufous and ringed with white. Fore wing white faintly tinged with rufous; a sinuous brownish subbasal line from costa to inner margin; a fulvous yellow antemedial patch with irregular edges from costa to median nervure

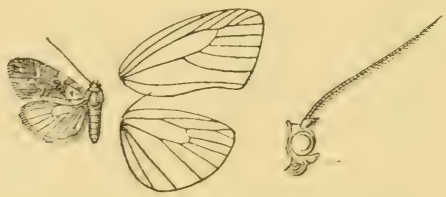

Fig. 268.—*Gymnochroma plagiata*, ♂. ⅔.

and oblique brown line from it to inner margin; a round dark red-brown spot with white annulus in middle of cell; a fulvous yellow band with irregular outer edge from costa across end of cell to vein 2 with brown line from it to inner margin; an oblique fulvous yellow patch from apical part of costa to discal fold beyond the cell, where it is almost joined by an irregularly triangular patch from middle of termen enclosing a slight white mark on termen at vein 4; a fulvous yellow patch from below vein 3 to above inner margin extending from just beyond the postmedial band to termen. Hind wing semihyaline white.
Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 16 millim.

Genus **MELASTROTA**.

Type.
Melastrota, Hmpsn. A. M. N. H. (7) xv. p. 439 (1905) ..... *nigrisquamata*.

Proboscis fully developed; palpi porrect to just beyond frons; antennæ of male ciliated; hind tibiæ with the spurs long. Fore wing rather short and broad; vein 2 from towards angle of cell, oblique; 3 from before angle; 5 absent; 6 from below upper angle; 7, 8 and 9, 10 stalked; 11 anastomosing with 12, which has two veinlets between it and costa; male with the subcostal area to end of cell and upper part of cell clothed with black scales on

underside. Hind wing with vein 2 from before middle of cell; 3, 5 absent; 6, 7 stalked; 8 from middle of cell.

In key differs from *Chlorogenia* in the fore wing having vein 9 stalked with 10, vein 12 with veinlets between it and costa.

1150 *b*. **Melastrota nigrisquamata.**

Pseudoblabes nigrisquamata, Swinh. A. M. N. H. (7) vii. p. 467 (1901).

♂. Fulvous yellow; head orange; underside of wings brownish

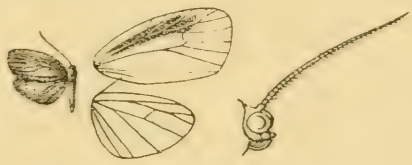

Fig. 269.—*Melastrota nigrisquamata*, ♂. ½.

fore wing with black patch on subcostal area and in upper part of cell.

Hab. Queensland, Kuranda (*Dodd*), 1 ♂, Duaringa, 1 ♂ type. *Exp.* 18 millim.

1150 *c*. **Melastrota dona.** (Plate XLI. fig. 34.)

Pseudoblabes dona, Swinh. A. M. N. H. (7) vii. p. 467 (1901).

♀. Head, thorax, and abdomen orange-yellow. Fore wing reddish brown; the base yellow; a triangular yellow patch from middle of costa to median nervure; the apical area yellow, its inner edge curved from costa beyond middle to termen above tornus. Hind wing yellow to middle of costa and tornus, the apical area reddish brown.

Hab. Queensland, Duaringa, 1 ♀ type. *Exp.* 18 millim.

*1151 *a*. **Chlorogenia pallidimaculata.**

Stictosia pallidimaculata, Roths. Nov. Zool. xix. p. 244 (1912).

Fore wing with vein 11 not anastomosing with 12.

♂. Head, thorax, and abdomen pale yellow, the patagia pale red-brown. Fore wing pale yellow, the costal edge blackish towards base; a broad pale red-brown antemedial band enclosing a yellow spot below costa, its outer edge oblique to lower angle of cell; the area beyond the cell pale red-brown enclosing a postmedial yellow spot below the costa, the inner edge of this area incurved and conjoined to the antemedial red-brown band at lower angle of cell; the termen narrowly yellow except towards tornus and the cilia yellow. Hind wing pale yellow tinged with rufous; the

terminal area suffused with red-brown from apex to submedian fold. Underside of fore wing with the costal and terminal areas dark

Fig. 270.—*Chlorogenia pallidimaculata*, ♂. $\frac{1}{1}$.

brown; hind wing with the costa and apical part of termen dark brown.

Hab. Br. N. Guinea, Mambare R., Biagi (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 18 millim.

Genus **CHRYSOMESIA**.

Type.

Chrysomesia, Hmpsn. A. M. N. H. (7) xi. p. 350 (1903) ..... *barbicostata*.

Proboscis fully developed; palpi porrect, extending as far as frons; antennæ of male ciliated; tibiæ with the spurs moderate. Fore wing with the cell very long and narrow; vein 2 from well before middle of cell; 3 from just beyond middle; 5 from well above angle; 6, 7 stalked; 8, 9 10 absent; 11 free; male with a costal fold on upperside with a fringe of large scales, spatulate scales and hair from under it. Hind wing with the cell very long; vein 2 from before middle; 3 from well before angle; 5 from angle of discocellulars; 6, 7 stalked; 8 from middle of cell; male with a fringe of long hair below medial part of costa on upperside.

In key differs from *Hypeugoa* in the fore wing having veins 8, 9, 10 absent.

1151 *b*. **Chrysomesia barbicostata.**

Chrysomesia barbicostata, Hmpsn. A. M. N. H. (7) xi. p. 350 (1903).

♂. Head and tegulæ golden yellow; palpi and antennæ rufous;

Fig. 271.—*Chrysomesia barbicostata*, ♂. $\frac{1}{1}$

thorax rufous suffused with purple; pectus, legs, and abdomen ochreous, the last dorsally rufous towards extremity. Fore wing

red-brown suffused with purple, the medial half of wing golden yellow except the costal fold and fringe; the basal area defined by an oblique blackish line and the terminal area by a curved line. Hind wing pale rufous, the area below the costal fold whitish.

Hab. Br. N. Guinea, Port Moresby (*Kowald*), 1 ♂ type. *Exp.* 20 millim.

*1152 *a*. **Heterallactis chrysopera**, n. sp.

Fore wing of male with patch of fuscous androconia below extremity of median nervure; hind wing with the costa highly arched, vein 8 at extremity and vein 7 bent upwards to the costa.

♂. Head, tegulæ, and a patch on prothorax bright yellow; antennæ and the rest of thorax red-brown; pectus, legs, and

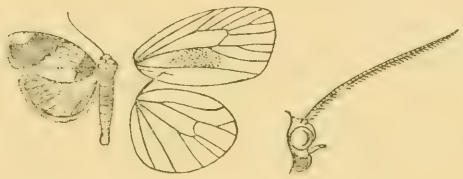

Fig. 272.—*Heterallactis chrysopera*, ♂. ⅔.

abdomen whitish tinged with red-brown. Fore wing bright red-brown; a broad oblique golden yellow band from costa just before middle to medial part of inner margin, towards which it expands somewhat, edged by very slightly waved dark lines; a golden yellow apical patch. Hind wing whitish tinged with red-brown except on costal area to towards apex.

♀. Fore wing with the medial band of even width throughout.

Hab. Br. N. Guinea, Collingwood Bay, Haidana (*Meek*), type † ♂, ♀ in Coll. Rothschild, Kumusi R. (*Meek*). *Exp.* ♂ 18, ♀ 16 millim.

*1152 *b*. **Heterallactis semiconstricta**, n. sp.
(Plate XLI. fig. 35.)

♂. Head, tegulæ, and a patch on prothorax bright yellow, the antennæ and rest of thorax bright red-brown; pectus, legs, and abdomen whitish faintly tinged with red-brown. Fore wing bright red-brown; a golden yellow band from costa before middle, rather broad to discal fold, then expanding greatly on outer side and very broad to inner margin, edged by dark lines; an apical golden yellow patch. Hind wing whitish faintly tinged with red-brown.

Hab. Br. N. Guinea, Kumusi R. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 20 millim.

1153 *a*. **Diduga plumosa.** (Plate XLI. fig. 36.)

Diduga plumosa, Hmpsn. A. M. N. H. (8) viii. p. 406 (1911).

♂. Head, thorax, and abdomen greyish suffused with brown; palpi and fore legs blackish. Fore wing greyish suffused with red-brown; an oblique antemedial brown line with small spot at costa, slightly incurved below submedian fold and with some brown suffusion beyond it in cell; a faint elliptical brown annulus just beyond the cell; postmedial line with dark spot at costa, very strongly bent outwards below costa, then waved, bent inwards at vein 3, a maculate brown band beyond it and some dark points on costa; a terminal series of dark points. Hind wing greyish suffused with brown.

Hab. Sumbawa, Tambora (*Doherty*), 1 ♂ type. *Exp.* 16 millim.

1159 *a*. **Diduga albida**, n. sp. (Plate XLII. fig. 1.)

♂. Head, thorax, and abdomen white, the last dorsally tinged with brown except at base. Fore wing white, traces of brownish antemedial spots on costa, below the cell, and at inner margin; a faint diffused curved brownish medial line; a faint diffused brownish postmedial line, oblique to vein 6, then erect to tornus. Hind wing white.

Hab. Dutch N. Guinea, Mimika R. (*Wollaston*), 1 ♂ type. *Exp.* 16 millim.

1162. **Eugoa grisea.**

Antennæ of male bipectinate.

Ab. *suffusa*, Wileman, Entom. xliii. p. 222 (1910).

Fore wing thickly irrorated with brown.

Hab. Formosa, Rantaizan (*Wileman*), type † ♂ in Coll. Wileman.

1162 *a*. **Eugoa sexpuncta.** (Plate XLII. fig. 2.)

Eugoa sexpuncta, Hmpsn. A. M. N. H. (8) viii. p. 406 (1911).

♂. Head and thorax yellow tinged with brown; sides of palpi and frons black; abdomen yellow. Fore wing yellowish slightly irrorated with brown, the terminal area slightly suffused with brown; small obliquely-placed subbasal and antemedial black spots below costa and in submedian fold, a spot above base of vein 2 and a discoidal spot; an oblique brown shade from postmedial part of costa to discal fold beyond the cell and an incurved shade on inner area with blackish spots on it above and below vein 1; an obscure rather diffused dark subterminal line arising from apex, angled outwards at vein 7, excurved at middle and above tornus and

angled inwards at discal fold and at vein 2. Hind wing yellow, the apex slightly tinged with brown.

Hab. Dutch N. Guinea, Fak-fak (*Pratt*), 1 ♂ type. *Exp.* 24 millim.

*1164 *a*. Eugoa tricolora.

Eugoa tricolora, Beth.-Baker, Nov. Zool. xi. p. 427, pl. v. f. 13 (1904).

♂. Head and thorax purplish fuscous; palpi at tips and frons white; thorax with some greyish patches; fore legs blackish; pectus and mid and hind legs yellowish; abdomen yellowish dorsally tinged with fuscous. Fore wing white; subbasal purplish fuscous patches on costa and below the cell; an antemedial band narrowing in cell, its outer edge angled inwards on vein 1, greatly expanding on inner margin; a black point above origin of vein 2; terminal half purplish fuscous, its inner edge incurved below costa and strongly angled inwards on vein 2; a diffused white subterminal line, angled inwards at vein 7 and strongly incurved below veins 6 and 3. Hind wing pale yellow; the underside with fuscous patch on costa before apex.

Hab. Br. N. Guinea, Dinawa, 4000′ (*Pratt*), type † ♂ in Coll. Bethune-Baker. *Exp.* 24 millim.

1164 *b*. Eugoa sordida. (Plate XLII. fig. 3.)

Eugoa sordida, Roths. Nov. Zool. xx. p. 221 (1913).

♂. Head and thorax creamy white; the antennæ grey-brown, the vertex of head, tegulæ, patagia, and prothorax with grey-brown patches, the rest of thorax suffused with grey-brown; palpi with some brown at sides; the fore legs brown on inner side; abdomen pale yellow. Fore wing creamy white; the costal edge black-brown towards base; a subbasal reddish brown spot on costa and blackish spot below the cell; a diffused inwardly oblique red-brown antemedial band; a small red-brown spot in middle of cell and spot at upper angle, the latter touching an inwardly oblique red-brown postmedial band, its inner edge incurved below vein 4 and its outer edge diffused except towards costa; a reddish brown terminal band with irregular dark inner edge angled inwards to the postmedial band at discal fold and below vein 3; cilia yellowish with a dark brown line at middle. Hind wing pale yellow. Underside of fore wing suffused with reddish brown except the inner area and patches on costa beyond middle and towards apex; hind wing with some brown suffusion on costa towards apex.

Hab. Dutch N. Guinea, Fak-fak (*Pratt*), 1 ♂, Mimika R. (*Wollaston*), 1 ♂, Setekwa R. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 30 millim.

1164 *c*. **Eugoa gemina**, n. sp.. (Plate XLII. fig. 4.)

♂. Head and thorax pale ochreous brown; abdomen grey tinged with brown. Fore wing grey tinged with ochreous brown, the costal and terminal areas slightly irrorated with brown; an oblique blackish subbasal striga from costa; faint traces of an antemedial line; two minute obliquely placed black discoidal spots; a faint diffused postmedial line on costal area; a slight maculate dark subterminal line angled outwards to near termen at discal fold. Hind wing pale brownish grey. Underside of fore wing with the costal area suffused with fuscous brown; a black discoidal point; hind wing with slight black discoidal striga.

Hab. Gold Coast, Bibianaha (*Spurrell*), 1 ♂ type. *Exp.* 14 millim.

*1165 *a*. **Eugoa conflua**.

Eugoa conflua, Beth.-Baker, Nov. Zool. xi. p. 427, pl. v. f. 12 (1904).

♂. Head and thorax purplish fuscous; palpi at tips, frons, and base of antennæ whitish; patagia and thorax with three whitish bands; pectus and hind legs yellowish, the fore and mid legs mostly fuscous; abdomen yellowish dorsally suffused with fuscous. Fore wing white; a diffused purplish fuscous subbasal patch on costa and spot below the cell, the former conjoined to a diffused antemedial band angled outwards in the interspaces and inwards on the veins; two obliquely placed fuscous spots in end of cell; the terminal half purplish fuscous, its inner edge incurved below costa and strongly angled inwards on veins 2 and 1; a diffused whitish subterminal line, angled inwards at vein 7 and strongly incurved below veins 6 and 3; cilia pale at tips. Hind wing pale yellow; the underside with fuscous patch on costa towards apex.

Hab. Br. N. Guinea, Dinawa, 4000′ (*Pratt*), type † ♂ in Coll. Bethune-Baker. *Exp.* 26 millim.

*1165 *b*. **Eugoa sinuata**. (Plate XLII. fig. 5.)

Eugoa sinuata, Wileman, Entom. xlvii. p. 162 (1914).

♀. Head, thorax, and abdomen white. Fore wing silvery white, the costal edge black towards base; a subbasal black bar from costa connected by a streak below costa with the sinuous black antemedial line ending at submedian fold; two obliquely placed black points in end of cell; a triangular black mark on costa above end of cell with the black postmedial line arising from it, excurved round end of cell, then waved; an oblique wedge-shaped black patch on costa at apex with the slight sinuous blackish subterminal line arising from it, bent outwards to near termen between veins 4 and 3; cilia brownish. Hind wing white tinged with brown. Underside of fore wing suffused with brown.

Hab. Formosa, Rantaizan (*Wileman*), type † ♀ in Coll. Wileman. *Exp.* 32 millim.

1166. **Eugoa æqualis**, insert (syn.):—

Eugoa similis, Roths. Nov. Zool. xx. p. 221 (1913).

Perak (*Curtis*), type † ♀ in Coll. Rothschild. The form *trifascia*, Wlk.

1167 *a*. **Eugoa bilineata.** (Plate XLII. fig. 6.)

Eugoa bilineata, Hmpsn. A. M. N. H. (7) viii. p. 185 (1901).

♂. Ochreous; head, thorax, and abdomen irrorated with brown; palpi and antennæ tinged with brown. Fore wing slightly irrorated with brown; a strongly curved antemedial line expanding into a spot on costa; an elongate black point in end of cell; the postmedial line excurved beyond the cell and expanding into a spot on costa; subterminal streaks below veins 10, 8, and 4, and an oblique streak from postmedial line at vein 3 to tornus. Hind wing yellower.

Hab. Singapore (*Ridley*), 1 ♂ type. *Exp.* 16 millim.

*1168 *a*. **Eugoa transfasciata.** (Plate XLII. fig. 7.)

Eugoa transfasciata, Roths. Nov. Zool. xx. p. 221 (1913).

♂. Head, tegulæ, and prothorax creamy white, the rest of thorax dark reddish brown; antennæ brown, the shaft whitish above; palpi with some brown at sides; fore and mid legs suffused with brown; abdomen yellowish white, dorsally tinged with brown except towards base. Fore wing creamy white; a small dark reddish brown mark at base; the costal edge black-brown towards base; ante- and postmedial incurved dark reddish brown bands, the latter expanding somewhat towards inner margin; a semi-elliptical dark reddish brown patch on termen from below apex to above tornus. Hind wing pale yellow with some brownish suffusion at apex. Underside of fore wing with the whole terminal area brown except a yellowish subterminal band towards inner margin; hind wing with a brown apical patch.

Hab. Br. N. Guinea, Kumusi R. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

*1168 *b*. **Eugoa fasciata.** (Plate XLII. fig. 8.)

Eugoa fasciata, Roths. Nov. Zool. xx. p. 221 (1913).
Eugoa fasciata, subfasciata, Roths. Nov. Zool. xx. p. 221 (1913).

♂. Head and tegulæ pure white, the antennæ and palpi dark reddish brown; thorax dark reddish brown with some white on prothorax; pectus and hind legs mostly white; abdomen yellowish

white dorsally suffused with brown. Fore wing dark red-brown; an oblique pure white subbasal band with incurved inner edge from costa to vein 1; a somewhat oblique and slightly incurved medial white band; an incurved white band from apex to tornus towards which it narrows. Hind wing pale yellow, the terminal area broadly suffused with reddish brown.

Ab. 1. *subfasciata*. Fore wing with the medial band somewhat broader, the subterminal band obsolescent between discal and submedian folds.

Hab. Br. N. Guinea, Collingwood Bay, Haidana (*Meek*), type † ♂ in Coll. Rothschild, Kumusi R. (*Meek*), type † ♂ *subfasciata* in Coll. Rothschild. *Exp.* 20–22 millim.

1168 *c*. **Eugoa perfasciata**. (Plate XLII. fig. 9.)

Eugoa perfasciata, Roths. Nov. Zool. xx. p. 226 (1913).

Head and tegulæ silvery white; antennæ brown; thorax glossy red-brown with a white patch on metathorax; pectus, legs, and abdomen pale yellow, the fore tibiæ and the tarsi towards extremities suffused with brown. Fore wing silvery white; the base glossy red-brown; broad obliquely incurved ante- and postmedial glossy red-brown bands; a semi-elliptical glossy red-brown patch on termen from below apex to tornus; cilia red-brown. Hind wing pale yellow, the apical area tinged with reddish brown.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♀ in Coll. Rothschild; Br. N. Guinea, Kumusi R. (*Meek*), 2 ♂. *Exp.* 20 millim.

1170 *a*. **Eugoa immunda**. (Plate XLII. fig. 12.)

Eugoa immunda, Swinh. A. M. N. H. (7) xi. p. 501 (1903).

♀. Head, thorax, and abdomen brownish grey, the vertex of head, tegulæ, and ventral surface of abdomen with an ochreous tinge. Fore wing brownish grey irrorated and striated with fuscous brown; the basal area blackish; an oblique incurved postmedial diffused line with the area beyond it suffused with fuscous. Hind wing pale fuscous.

Hab. Siam, Muok-Lek (*Frühstorfer*), 1 ♀ type. *Exp.* 16 millim.

1173 *a*. **Eugoa euryphæa**, n. sp. (Plate XLII. fig. 13.)

♀. Head, thorax, and abdomen ochreous suffused with rufous. Fore wing ochreous tinged and irrorated with rufous; a patch of purplish brown suffusion on basal area except at inner margin; antemedial line purplish brown, indistinct, angled outwards at

submedian fold and inwards at vein 1; an inwardly oblique dark line just beyond middle with broad purplish brown shade beyond it; slight purplish brown streaks on the extremities of the veins. Hind wing ochreous, the apex tinged with brown.

Hab. Sikhim, 2800′ (*Pilcher*), 1 ♀ type. *Exp.* 24 millim.

1173 *b*. **Eugoa brunnea**, n. sp. (Plate XLII. fig. 14.)

♂. Head and tegulæ yellowish white, the antennæ, frons, and palpi brown; thorax and abdomen reddish brown. Fore wing red-brown mixed with greyish ochreous; a subbasal black point in the cell; traces of a waved dark antemedial line; a black discoidal point; traces of a diffused dark subterminal line, oblique towards costa and excurved at middle. Hind wing pale red-brown.

♀. Fore wing with the head and tegulæ brown.

Hab. Formosa, Takow (*Hobson*), 1 ♀, Kanshirei (*Wileman*), 1 ♂ type. *Exp.* 20 millim.

Page 549. Genus **TRISCHALIS**.

Sect. I. Antennæ of male bipectinate with moderate branches, the apex serrate.

A. Fore wing with veins 4, 5 shortly stalked.

1175 *a*. **Trischalis orientalis.** (Plate XLII. fig. 19.)

Trischalis iridescens, orientalis, Roths. Nov. Zool. xx. p. 222 (1913).

Head and thorax pale golden yellow; abdomen yellowish white, the ventral surface yellow. Fore wing chrome-yellow; an obliquely curved medial brown line with a golden cupreous gloss, running along the costa to the base; a slightly sinuous brown subterminal line with a golden cupreous gloss from just below costa to inner margin, the area beyond it suffused with cupreous brown, Hind wing yellowish white.

Hab. Br. N. Guinea, Collingwood Bay, Haidana (*Meek*), type † ♂ in Coll. Rothschild, Kumusi R. (*Meek*), 1 ♂, 1 ♀. *Exp.* 18 millim.

B. Fore wing with veins 4, 5 separate at origin.

*1175 *b*. **Trischalis iridescens.** (Plate XLII. fig. 20.)

Trischalis iridescens, Roths. Nov. Zool. xx. p. 222 (1913).

♂. Head and thorax golden yellow, the tips of patagia and metathorax suffused with cupreous brown; abdomen yellow. Fore wing chrome-yellow, a strongly excurved medial brown line with a golden cupreous gloss, running along the costa to base and to submedian fold at base, a faint short brownish streak from its outer edge at vein 4; a dark brown subterminal sinuous line with a golden cupreous gloss from just below costa to inner margin, the area

beyond it golden cupreous brown from vein 6 to tornus. Hind wing pale yellow.

Hab. Dutch N. Guinea, Mt. Goliath (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 18 millim. This species would by the key fall in *Stigmatophora*, but its affinities are obvious.

*1176 *a*. Trischalis aureoplagiata. (Plate XLII. fig. 23.)

Eugoa aureoplagiata, Roths. Nov. Zool. xx. p. 222 (1913).

Head and thorax golden yellow; abdomen yellowish white, the ventral surface pale yellow. Fore wing pale grey-brown, the basal, costal, and apical areas golden yellow, the brown area edged by diffused cupreous scales, the yellow on costa expanding into a patch at end of cell; a conical paler yellow patch at middle of inner margin. Hind wing yellowish white.

Hab. Br. N. Guinea, Kumusi R. (*Meek*), type † ♂, ♀ in Coll. Rothschild. *Exp.* 20 millim.

1181 *a*. Stigmatophora tridens. (Plate XLII. fig. 24.)

Miltochrista tridens, Wileman, Entom. xliii. p. 244 (1910).

♂. Head and thorax scarlet; abdomen pale crimson. Fore wing scarlet; a small subbasal black spot in cell; an inwardly oblique antemedial black line from below costa to inner margin; a small black discoidal spot; a black postmedial line, excurved below costa, angled inwards at discoidal fold to near the discoidal spot, excurved at middle, then strongly incurved, with short black streaks beyond it above and below discal fold, above vein 2, and above and below submedian fold, three small obliquely placed subapical black spots and a subterminal black spot below vein 4. Hind wing pale crimson.

Hab. Formosa, Kanshirei (*Wileman*), 1 ♂. *Exp.* 32 millim. Type † ♂ in Coll. Wileman.

1182 *a*. Stigmatophora disticha, trans. from *Asura*, no. 973.

*1188 *a*. Metallosia nitens. (Plate XLII. fig. 25.)

Metallosia nitens, Schaus, A. M. N. H. (8) vii. p. 369 (1911).

♀. Head and thorax brown suffused with metallic green; abdomen brown slightly suffused with metallic green. Fore wing brown suffused with metallic green. Hind wing uniform brown. Underside of both wings uniform brown,

Hab. Costa Rica, Sixola R. (*Schaus*), type † ♀ in U.S. Nat. Mus. *Exp.* 20 millim.

Genus **DEUA**.

Type.
Deua, Wlk. xxx. 1013 (1864) ..... *imbutana*.

Proboscis present; (palpi wanting); antennæ of male ciliated; (legs and abdomen wanting). Fore wing short and broad, the apex rounded, the termen evenly curved; vein 2 from towards angle of cell, curved; 3 and 5 from near angle; 6, 7 from below upper angle; 8 from angle; 9, 10 shortly stalked; 11 from cell. Hind wing with veins 2 and 4 from angle of cell; 3 and 5 absent; 6, 7 coincident; 8 anastomosing with cell to extremity.

In key differs from *Paremonia* in the fore wing having veins 9, 10 stalked; hind wing with vein 3 absent and 6, 7 coincident.

1188 *b*. **Deua imbutana.**

Deua imbutana, Wlk. xxx. 1013 (1864).

♂. Cupreous brown; antennæ pale yellowish. Fore wing with the costal edge whitish; a blackish discoidal bar on a greyish

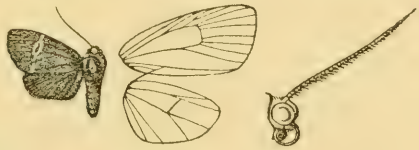

Fig. 273.—*Deua imbutana*, ♂. ⅔.

ochreous elliptical patch, a slight blackish line from it to inner margin defined by greyish ochreous on inner side.

Hab. Brazil, Amazons, Ega (*Bates*), 1 ♂ type. *Exp.* 14 millim.

*1190 *a*. **Hemonia schistaceoalba.** (Plate XLII. fig. 26.)

Hemonia schistaceoalba, Roths. Nov. Zool. xx. p. 223 (1913).

Antennæ of female bipectinate with moderate branches, the apex serrate.

♀. Head and thorax pale brown with a silvery gloss; pectus and legs white, the fore tibiæ and tarsi brown; abdomen white, dorsally tinged with brown towards extremity. Fore wing creamy white, the basal, costal, and terminal areas reddish brown with a slight blue-grey gloss, the upper edge of the white area evenly arched and the brown area narrowing to tornus; traces of two obliquely curved darker brown lines on the brown area from costa beyond middle to termen above tornus. Hind wing creamy white.

Hab. Br. N. Guinea, Kumusi R. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 22 millim.

*1190 *b*. **Hemonia simillima.** (Plate XLII. fig. 27.)

Hemonia simillima, Roths. Nov. Zool. xx. p. 223 (1913).

♀. Head and thorax red-brown with a greyish gloss; pectus, legs, and abdomen creamy white, the fore legs suffused with brown in front. Fore wing with the basal, costal, and terminal areas brown with a greyish gloss, the rest of wing paler and redder brown; an indistinct dark antemedial line, arising below costa, excurved in cell and below submedian fold and with a small orange spot on its outer edge at submedian fold; a small orange discoidal spot; two slight very minutely waved and obliquely excurved dark lines from costa beyond middle to termen above tornus. Hind wing white.

Hab. Br. N. Guinea, Collingwood Bay, Haidana (*Meek*), type † ♀ in Coll. Rothschild, Kumusi R. (*Meek*). *Exp.* 22 millim.

*1190 *c*. **Hemonia schistacea.** (Plate XLII. fig. 28.)

Hemonia schistacea, Roths. Nov. Zool. xx. p. 222 (1913).

♂. Head and thorax blue-grey; antennæ browner; palpi brownish; pectus and legs yellowish, the fore and mid legs suffused with brown; abdomen yellowish white, the ventral surface yellower. Fore wing blue-grey with a silvery gloss; the costal edge blackish; a curved series of three small antemedial black spots above, in, and below the cell, and a small discoidal spot; a curved black line from costa towards apex to termen at vein 2, the area beyond it darker. Hind wing yellowish white; the underside with the terminal half of costa tinged with brown.

Hab. Dutch N. Guinea, Oetakwa R., Snow Mts. (*Meek*), type † ♂ in Coll. Rothschild. *Exp.* 24 millim.

*1190 *d*. **Hemonia murina.** (Plate XLII. fig. 29.)

Hemonia murina, Roths. Nov. Zool. xx. p. 223 (1913).

♀. Head and thorax pale grey-brown; pectus, legs, and abdomen white faintly tinged with brown. Fore wing pale grey-brown; a black discoidal point; the costal edge darker brown; an obliquely curved brown line from costa beyond middle to termen at vein 2. Hind wing very pale grey-brown.

Hab. Br. N. Guinea, Kumusi R. (*Meek*), type † ♀ in Coll. Rothschild. *Exp.* 22 millim.

1190 *e*. **Hemonia pallida,** n. sp. (Plate XLII. fig. 30.)

Head and thorax whitish suffused with pale red-brown; abdomen creamy white; pectus, legs, and ventral surface of abdomen white tinged with rufous. Fore wing creamy white suffused with rufous; a small rufous discoidal spot with some blackish scales on it; the

costal edge dark red-brown; an obliquely curved dark red-brown line from costa beyond middle to termen above tornus, the apex beyond it red-brown. Hind wing creamy white.

Hab. Borneo, Sarawak (*Wallace*), 2 ♀; Br. N. Guinea, Port Moresby (*Kowald*), 1 ♂ type. *Exp.* 20–24 millim.

1190*f*. **Hemonia rotundata.**

Pitane rotundata, Snell, Tijd. v. Ent. xxii. p. 90, pl. x. ff. 6*a–d* (1879).

♀. Head and thorax brown suffused with purplish grey; pectus, legs, and abdomen whitish tinged with rufous. Fore wing purplish grey irrorated with dark brown scales; obscure dark spots in and below middle of cell; a small round rufous discoidal spot with some

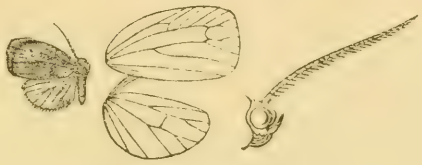

Fig. 274.—*Hemonia rotundata*, ♀. ½.

blackish scales on it; the costa dark brown tinged with grey; an obliquely curved dark brown line from costa beyond middle to termen above tornus, the apical area beyond it dark brown suffused with silvery grey. Hind wing creamy white. Underside of fore wing pale reddish brown.

Hab. Singapore (*Ridley*), 4 ♀; Celebes. *Exp.* 20–22 millim.

1190*g*. **Hemonia monochroa**, n. sp. (Plate XLII. fig. 31.)

♀. Head and thorax brown suffused with purplish grey; antennæ red-brown; pectus, legs, and abdomen white tinged with rufous. Fore wing brown suffused with purplish grey; a minute white spot in submedian fold below middle of cell and a similar discoidal spot. Hind wing pure white. Underside of fore wing brownish grey.

Hab. Br. N. Guinea, Kumusi R. (*Meek*), 1 ♀ type. *Exp* 22 millim.

1191. **Hemonia orbiferana.**

Antennæ of male bipectinate, of female ciliated.

Hab. India; Ceylon.

1191 *a*. **Hemonia ciliata**, n. sp.

Antennæ ciliated in both sexes.

Head and thorax whitish suffused with pale red-brown; abdomen white; pectus, legs, and ventral surface of abdomen white tinged with rufous. Fore wing whitish suffused with red-brown and irrorated with some dark brown scales; obscure dark spots in and below middle of cell; a small round rufous discoidal spot with

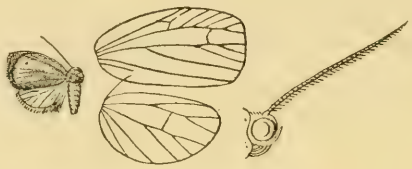

Fig. 275.—*Hemonia ciliata*, ♂. ½.

some black scales in centre; the costal edge dark brown; an obliquely curved dark brown line from costa beyond middle to termen above tornus, the apical area beyond it reddish brown suffused with silvery grey. Hind wing creamy white. Underside of fore wing white tinged with reddish brown.

Hab. Borneo, Sarawak (*Wallace*, *Bartlett*), 1 ♂, 2 ♀ type. *Exp.* 20 millim.

1192 *a*. **Paremonia argentata**, n. sp.

Hind wing with veins 3, 4 and 6, 7 from cell.

♀. Head, thorax, and abdomen pale yellow. Fore wing pale yellow; a brownish and silvery fascia below basal part of costa with the oblique waved brownish and silvery antemedial band from

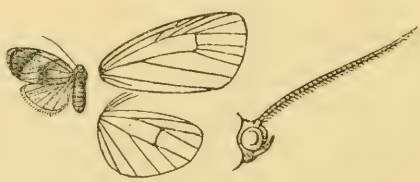

Fig. 276.—*Paremonia argentata*, ♂. ½.

its extremity to inner margin; a narrow obliquely curved brownish and silvery band from costa beyond middle to tornus; a very narrow curved brownish and silvery band from costa towards apex to termen at vein 2. Hind wing pale yellow.

Hab. Gold Coast, Bibianaha (*Spurrell*), 1 ♀ type. *Exp.* 20 millim.

ADDENDA.

*247 *e*. Crambidia allegheniensis.

Crambidia allegheniensis, Holland, Moth Book, p. 104, pl. xiii. f. 31 (1903).

♂. Head, tegulæ, and patagia pale yellow; thorax and abdomen slate-grey; legs ochreous; ventral surface of abdomen dark slate-grey at middle, ochreous at extremity. Fore wing pale slate-grey with pale yellow costal fascia. Hind wing semihyaline white. Underside paler.

Hab. U.S.A., Pennsylvania, Pittsburgh. *Exp.* 30 millim. This species is unknown to me.

368 *b*. Ilema interposita. (Plate XLI. fig. 38.)

Ilema interposita, Roths. Nov. Zool. xxi. p. 354 (1914).

♂: Head, thorax, and abdomen white tinged with brown; antennæ fuscous except at base; pectus, legs, and ventral surface of abdomen browner. Fore wing silvery white with a faint brownish tinge, the costal edge fuscous towards base. Hind wing white with a faint brownish tinge. Underside of fore wing except the costal edge and costal area of hind wing brown.

Hab. Algeria, Guelt-es-Stel (*Rothschild*), 6 ♂. *Exp.* 28–34 millim. Type † ♂ in Coll. Rothschild.

List of Unrecognised Species.

Agylla bioptera, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 164 (1914). Panama.

„ *niphostibes*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 165 (1914). Near *A. nivea*, Wlk. ..... Panama.

„ *septentrionalis*, Barnes & McD., J. N.Y. Ent. Soc. xix. p. 151 (1910); id. Contr. Nat. Hist. Lep. N. Am. i. 4, pl. 23. f. 7 ..... Arizona.

Agylloides asurella & ab. *obscurella*, Strand, Arch. Naturg. lxxviii. 7, pp. 186–7 (1912) ..... Togoland.

„ *problematica*, Strand, Arch. Naturg. lxxviii. 7, p. 187 (1912) ..... Cameroons.

Anæne diagramma, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 172 (1914). Panama.

Anæne improspera, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 172 (1914) Panama.

„ *spurca*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 171 (1914). Panama.

„ *squalida*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 171 (1914). Panama.

Asura camerunensis, Strand, Arch. Naturg. lxxviii. 9, p. 102 (1912). Near *A. obliterata*, Wlk. ... Cameroons.

„ *discocellularis*, Strand, Arch. Naturg. lxxviii. 9, p. 100 (1912). Near *A. obliterata*, Wlk. ... Cameroons.

„ *guntheri*, Strand, Arch. Naturg. lxxviii. 9, p. 101 (1912). Near *A. obliterata*, Wlk. ..... Cameroons.

„ *thumathæformis*, Strand, Arch. Naturg. lxxviii. 7, p. 192 (1912) ..... Natal.

Barsinella desetta, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 170 (1914). Panama.

Chionæma loloana, Strand, Arch. Naturg. lxxviii. 7, p. 190 (1912). Near *C. trigutta*, Wlk. ..... Cameroons.

„ *togoana*, Strand, Arch. Naturg. lxxviii. 7, p. 189 (1912). Togoland.

„ *ugandana*, Strand, Arch. Naturg. lxxviii. 7, p. 189 (1912). Near *C. rubristriga*, Holl. ..... Uganda.

Chrysæglioides uoliformis, Strand, Arch. Naturg. lxxviii. 7, pp. 184–5 (1912) ..... Gaboon.

Comarchis epigypsa, Lower, Tr. R. Soc. S. Austr. xxvi. p. 212 (1902). S. Australia.

Dixanæne lepidocæna, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 172 (1914). Panama.

Eilema angulistrigata, Strand, Arch. Naturg. lxxviii. 7, p. 182 (1912). Near *I. oblitterans*, Feld. ... Cameroons.

„ *angustipennis*, Strand, Arch. Naturg. lxxviii. 7, p. 183 (1912) ..... Cameroons.

„ *caffrana*, Strand, Arch. Naturg. lxxviii. 7, p. 178 (1912). Near *I. morosina*, Herr.-Schäff. ..... Cape Colony.

„ *cuneata*, Strand, Arch. Naturg. lxxviii. 7, p. 179 (1912). Togoland.

„ *makomensis*, Strand, Arch. Naturg. lxxviii. 9, p. 97 (1912). Near *I. oblitterans*, Feld. ..... Cameroons.

„ *marwitziana*, Strand, Arch. Naturg. lxxviii. 7, p. 177 (1912). Near *I. flavibasis*, Hmpsn. Germ. E. Africa.

„ *pusilana*, Strand, Arch. Naturg. lxxviii. 7, p. 178 (1912). Near *I. vicaria*, Wlk. ..... Germ. E. Africa.

„ *subgriseola*, Strand, Arch. Naturg. lxxviii. 9, p. 98 (1912). Near *I. griseola*, Hübn. ..... Cameroons.

„ *trinitas*, Strand, Arch. Naturg. lxxviii. 7, p. 181 (1912). Near *I. costimacula*, Mab. ..... Togoland.

„ *verulana*, Strand, Arch. Naturg. lxxviii. 7, p. 183 (1912). Near *I. sororcula*, Hüfn. ..... Natal.

Eilema voeltzkowi, Auriv. Voeltzkow Reis in Ost-Africa, ii. p. 340, pl. 19. f. 12 (1909) ..... Madagascar.

Eutane triplagiata, Pag. Zoologica, xii. 29. p. 59, pl. ii. f. 24 (1900). ? *Eugoa* ..... Bismarck Arch.

Gaudeator paidicus, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 164 (1914) Panama.

Geridixis minæ, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 171 (1914). Panama.

Ilema andrioconia, Heyn, Soc. Ent. xix. p. 25 (1904). Br. E. Africa.

„ *okiensis*, Miyake, Anot. Zool. Japon. vi. p. 207 (1907). Japan.

Illice conjuncta, Barnes & McD. Contr. Nat. Hist. Lep. N. Am. ii. 3, p. 102, pl. 9. f. 14 (1913). Near *I. subjecta*, Wlk. ..... Texas.

„ *leuconotum*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 167 (1914). Panama.

Lithosia unipunctata, Staud. Iris, xii. p. 157 (1899); id. Cat. Lep. pal. p. 378 ..... Palestine.

Lycomorphodes genificans, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 169 (1914) ..... Panama.

Meneclia pallidula, Grünb. Denks. Med. Ges. Jena, xvi. pp. 122–3 (1910) ..... Germ. S.W. Africa.

Monotaxis montanus, Schultz, Philippine J. Sci. D. v. p. 164, pl. i. f. 10 (1910) ..... Philippines.

Nodozana albula, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 168 (1914). Panama.

Œdaleosia concolor, Strand, Arch. Naturg. lxxviii. 7, p. 191 (1912). ? Sudan.

„ *frontalis*, Strand, Ent. Rundschau, xxvi. p. 109 (1909). Germ. E. Africa.

Palæozana mida, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 167 (1914). Panama.

Paraona interjecta, Strand, Arch. Naturg. lxxviii. 7, p. 188 (1912). Natal.

Paraprepia fusculingua, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 168 (1914) ..... Panama.

Philenora asuræformis, Strand, Arch. Naturg. lxxviii. 7, p. 195 (1912) ..... Germ. E. Africa.

Phryganopsis flavifrontella, Strand, Arch. Naturg. lxxviii. 9, p. 94 (1912) ..... Cameroons.

„ *ilemimorpha*, Strand, Arch. Naturg. lxxviii. 9, p. 96 (1912) ..... Cameroons.

„ *jaundeana*, Strand, Arch. Naturg. lxxviii. 7, p. 174 (1912). Near *P. costimacula*, Mab. . Cameroons.

„ *loloana*, Strand, Arch. Naturg. lxxviii. 7, p. 172 (1912). Near *P. costimacula*, Mab. . Cameroons.

„ *monotonia*, Strand, Arch. Naturg. lxxviii. 7, p. 175 (1912) ..... Cameroons.

Phryganopsis nigrapex, Strand, Arch. Naturg. lxxviii. 7, p. 173 (1912). Near *P. asperatella*, Wlk. . Cameroons.
„ *nyassana*, Strand, Arch. Naturg. lxxviii. 7, p. 175 (1912). Near *P. cinerella*, Wllgrn. Germ. E. Africa.
„ *tessmanniana*, Strand, Arch. Naturg. lxxviii. 9, p. 95 (1912) ..... Cameroons.
„ *unipunctana*, Strand, Arch. Naturg. lxxviii. 7, p. 172 (1912) ..... Cameroons.
Ptychoglene tenuimargo, Holland, Moth Book, p. 110, pl. xiii. f. 17 (1903) ?= *Lycomorpha fulgens*, H. Edw. as named on plate ..... Arizona, Mexico.
Pusiola celidana, Strand, Arch. Naturg. lxxviii. 9, p. 93 (1912). Cameroons.
„ *occidentalis*, Strand, Arch. Naturg. lxxviii. 9, p. 92 (1912). Cameroons.
Serincia metallica, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 169 (1914). Panama.
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„ *mesospila*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 170 (1914). Panama.
„ *minynthadia*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 169 (1914). Panama.
„ *mona*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 170 (1914). Near *T. unimoda*, Schaus ..... Panama.
„ *violescens*, Dyar, Pr. U.S. Nat. Mus. xlvii. p. 169 (1914). Panama.
Tripura volzi, Weym. Iris, xxii. p. 25 (1909). Near *Aglla prasena* ..... Sumatra.

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